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MODERN LITHOGRAPHY

LITHOGRAPHED IN THE INTERESTS OF LITHOGRAPHERS EVERYWHERE



THE COVER

There's glamour (see page 16) in this display, a major award winner in the Window Displays Group of the All-America Package Competition sponsored by Modern Packaging Magazine. It was designed by Arthur R. Botham, Coty art director, and furnished by Einson-Freeman Co. Lithography figured prominently in the All-America Package Competition this year as in other years.

March, 1940

Volume 8 Number 3

Preston Mack, author of "The Glamour Market" on page 16, is a name with which readers will grow more familiar (we hope) during the next several months. He has consented to contribute a number of articles over the course of the year on lithographic markets. A careful observer, Mr. Mack is fitted by both temperament and experience to analyze the lithographic market from both the buyer's and the lithographer's point of view. An article of his, "Soap in the Public Prints", which appeared in a recent issue of *Soap* magazine, was widely quoted for its exposé of the gobs of misinformation and fallacy which appear in the public prints about that very common product, a cake of soap. Incidentally, this month's article on "The Glamour Market" is the eighth in the series on litho markets which has appeared since last June. The others have been: "The Liquor Market;" "The Tobacco Market;" "The Canned Foods Market;" "War and Lithography;" "Maps;" "Poster Stamps;" and "The Research Market." There are a limited number of back copies of the issues in which these appeared in case readers would like them.

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MODERN LITHOGRAPHY

Reg. U. S. Pat. Office

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Cost Committee Makes Progress

The Cost Committee of the National Association of Photo-Lithographers met on February 17th to receive a report from William Arthur Clark, Certified Public Accountant, as to (1) the studies he had made to set up a revised cost system and (2) to receive his report on the study of the revision of economic hourly rates and production standards.

Exhibits of the forms gathered from the industry gave concrete evidence of the need for uniformity of costing in the industry. Mr. Clark presented to the Committee nineteen different kinds of forms gathered, many kinds of payroll records, sales records, job cost summaries and monthly summary statements — almost all of them lacking uniformity.

He presented his recommendation of the forms which would be necessary to keep shop costs for small, medium and large lithographic plants.

After much deliberation it was suggested that the proposed system be proved in a half dozen or more plants. Several of the Cost Committee agreed to have Mr. Clark make studies in their plants.

After this study is completed Mr. Clark will present the revised system to the Cost Committee. It is hoped that he can appear at the Eighth Annual Convention of the National Association of Photo-Lithographers to be held in the Palmer House, Chicago, Ill., September 26th, 27th and 28th, and at that time present a uniform cost system for adoption by the Association.

For further information on this activity please write William Arthur Clark, Public Ledger Building, Philadelphia, Pa., or the National Association of Photo-Lithographers, 1776 Broadway, New York, N. Y.

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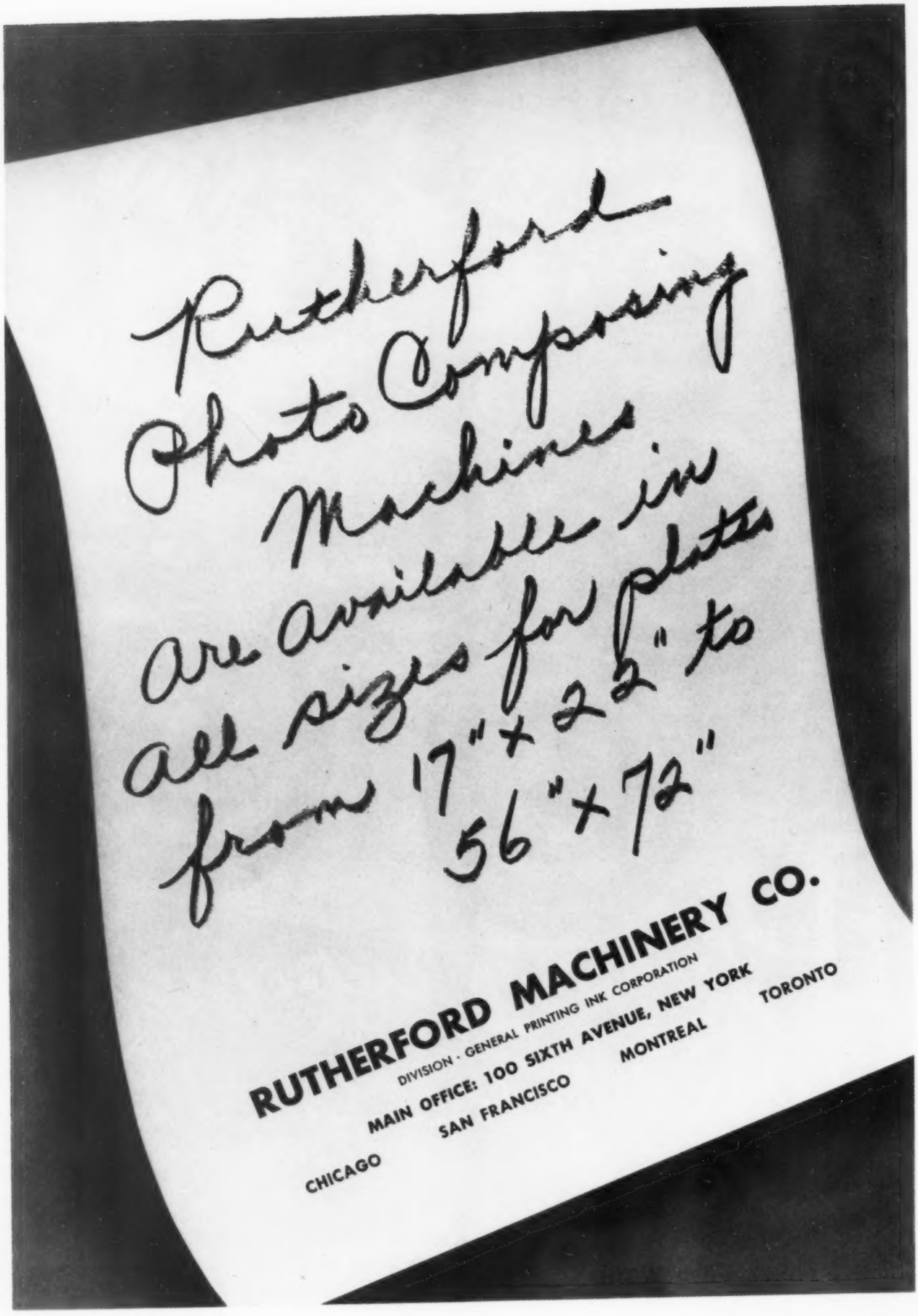


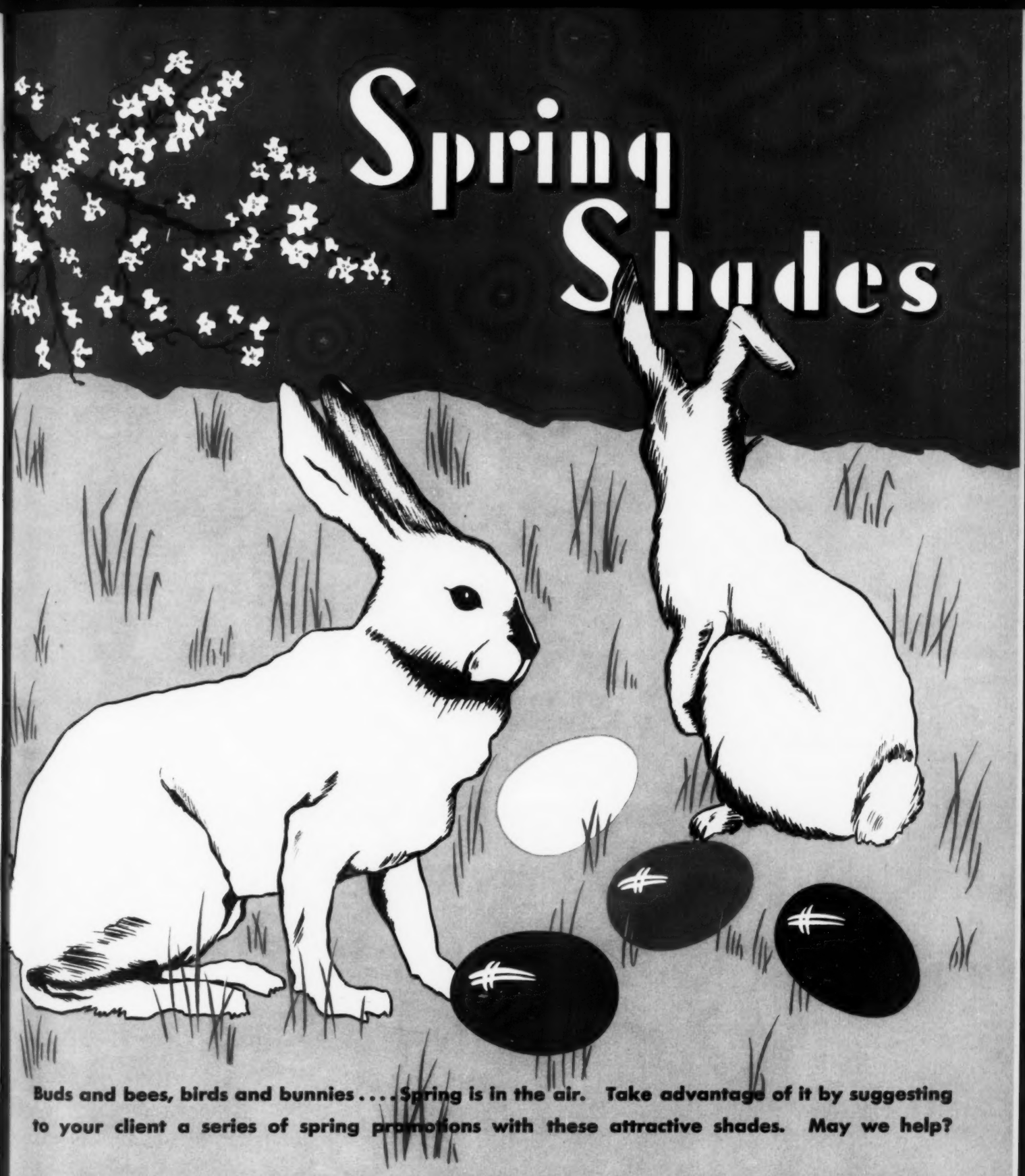
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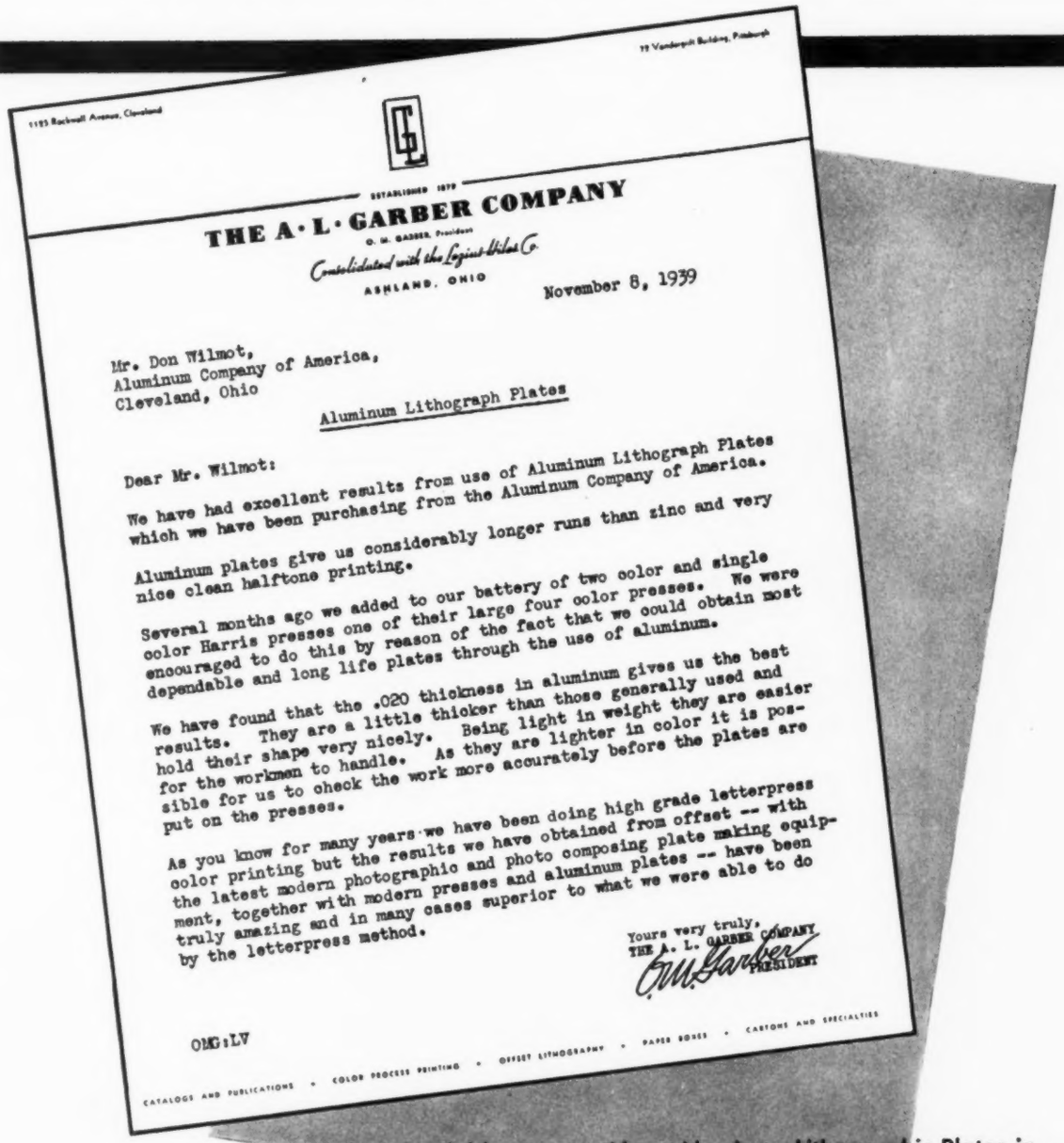
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November 8, 1939

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As you know for many years we have been doing high grade letterpress color printing but the results we have obtained from offset -- with the latest modern photographic and photo composing plate making equipment, together with modern presses and aluminum plates -- have been truly amazing and in many cases superior to what we were able to do by the letterpress method.

Yours very truly,
THE A. L. GARBER COMPANY
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EDITORIALS

WE SEE where the Lithographic Technical Foundation increased its student enrollment from 1100 to 1600 last year, making a total increase of 1100 students over five years ago. The Foundation now boasts a student body the size of an average college. Of course, more and better facilities, more courses and better instructors are responsible for a large share of this increase. At the same time there is a larger significance—the realization of the importance of offset today and of its even greater importance tomorrow, and a desire to be a part of the parade. The future of the offset industry makes a pleasant picture to contemplate. We would, though, like to offer one modest suggestion. And that is that the study and analysis of new and old markets for the lithographed product be constant and keep pace with the development of new processes and the betterment of materials, methods and machines used in production. As newcomers enter the field and competition becomes keener, market boundaries will have to be pushed back. The study and development of lithographic markets is just as important as technical research.

RUSSELL FORBES, Commissioner of Purchase of New York City, stoutly denies that he made an invidious distinction between offset printing and letterpress printing in his statement to the press last month in which he said that one of the "jokers" employed to make a profit, despite abnormally low bids, by the ring of collusive bidders on New York City printing, exposed by Commissioner Herlands, was to "print by the offset process rather than by the letterpress process required for use of the Allied Printing Trades Council label." Mr. Forbes issued the denial in reply to the charge that his statement carried a "misleading and injurious implication to the offset lithographic industry."

As proof of the non-existence of a discriminatory attitude towards offset by the Department of Purchase, Mr. Forbes says: "Ever since the opinion of the Supreme Court (the opinion referred to being that rendered by the Supreme Court of the State of New York restraining the City of New York from discriminating against the lithographic union label of the Amalgamated Lithographers of America in favor of the Allied Printing Trades Council label) we have secured bids on all jobs where lithography would be practicable on an alternate basis."

Of Mr. Forbes' original statement to the press the best that can be said in its favor is that it was unfortunately phrased. The worst that can be said of it is that by use of a cheap metaphor it likened offset to inferior printing, which it is not, and implied that the Allied Printing Trades Council label is the only valid one, which it is not. Of Mr. Forbes' statement in substantiation of his department's non-discriminatory attitude, we can only ask: If bids are secured on all jobs where lithography is practicable, why was not all the work which was given out on the basis that it would be done letterpress, but instead was printed by offset—why was not all this work given out originally for production by the offset method? The fact that it was done by offset and accepted is proof that lithography was "practicable." Perhaps the Department of Purchase just wasn't interested in the economy angle. After all it's the taxpayer's money, so why bother? Perhaps, which is very likely, the Department of Purchase couldn't tell offset from letterpress and didn't know it was getting the former. Perhaps, which is also very likely, the Allied Printing Trades Council represents a powerful political factor it would be folly to alienate.



THE Glamour MARKET

by Preston Mack

GLAMOUR is a commodity like a can of beans, a jar of horseradish or a bottle of catsup. It's put up in jars, bottles, wrappers, or little tubes and sold over the counter by the pound, the ounce or the slice. You can buy it at the five-and-dime or at a Fifth Avenue salon. Either place milady pays her money and has a wide choice. Who do you want to be today—Hedy Lamarr, Joan Crawford, Greta Garbo, Simone Simon or something Tyrone Power would go for?

Hollywood is undoubtedly responsible for glamour as it is peddled in the nation's beauty marts today (I can get it for you wholesale!). Overnight former Charleston contest winners, pretty school teachers unfortunate enough to have copped a beauty contest, hat check girls with big lips—along with other points—and foreign actresses with over-developed thyroids have been snatched from the comforts of comparative obscurity and transformed by the famous Hollywoodian touch into glamour girls, symbols of romance, mystery, allure, or something.

Whether the Hollywood touch does all that is another matter and beside the point. The point is the Hollywood build-up with its attendant fanfare — exotic and wonderful and strange pictures of the stars in all the film and picture magazines, stories of their private lives and loves, etc.— has made the American woman far more conscious of her figure, her hands, her hair, her complexion, her nails, her eyes, her lips, her toes (yes we said *toes!*) her teeth and her general appearance than her mother and grandmother ever were.



To sell glamour the cosmetic industry buys $7,000,000 worth of displays, labels, direct mail pieces, package inserts and dealer helps a year. Typical of the type of display used is this one designed and manufactured by Kay Displays, New York. It is not lithographed. The display shown on the cover this month, however, is. It was designed by Einson-Freeman and won a major award in the window displays classification of the All-America Package Competition sponsored by Modern Packaging Magazine.

We don't say that Hollywood is responsible for all of the interest the American woman of today has in beauty and toilet preparations, much of it is second nature with her, but we do maintain that one movie showing Robert Taylor kissing Myrna Loy's hand does more towards making women conscious of dishwater hands than twelve soap advertisements; or that a close-up of the lovely pan and flawless complexion of Olivia de Havilland makes a woman far more conscious of down on her upper lip or chin than twenty depilatory advertisements.

Consequently, Hollywood has influenced and promoted the growth of an industry that each year grows more and more important—the cosmetic and toilet goods industry. Whether the cinema capital is to be praised or censured, you are again entitled to your own opinion. The fact that the industry comprises a group of advertising-minded firms doing an annual volume in the neighborhood of $140,000,000 and buying each year about $7,000,000 worth of labels, displays, direct mail pieces, package inserts, dealer helps, etc., some $4,000,000 worth of which are products of lithographic presses may have something to do with how you feel about it. There are some 650 firms in the field doing a sufficient volume of business to be listed

An analysis of an industry that each year grows more and more important—the cosmetic and toilet goods industry, doing an annual volume in the neighborhood of $140,000,000 and offering an attractive outlet for sales of more and more lithography. Another in M. L.'s series on lithographic markets.

in McKittrick's Directory of Advertisers, a fairly nice prospect list for those litho firms who would like to cultivate this field. Let's have a look at this attractive market.

Our first approach to determining the amount of lithography bought by the industry was to question representative firms as to how their expenditures for all types of advertising materials compared on a percentage basis with their annual volume of business. On the basis of their reports it would seem to average somewhere in the neighborhood of six to seven per cent and the buyers estimated that perhaps thirty-five to forty per cent of their annual expenditures went for lithography. Figuring on this basis, the cosmetic industry buys upwards of three million dollars worth of lithography annually.

As a further check we worked back from figures obtained from a lithographic house, showing how much business it enjoys each year from several representative cosmetic firms. When projected in terms of the whole industry, on a comparative volume basis, the result indicated that our three million dollar figure was not too high, and might even be as much as a million dollars of an underestimate.

As to how this three or four million dollar total may be split up among labels, display materials and direct mail, we are less certain. One of our most dependable sources told us that the cosmetic industry uses annually some 550,000,000 labels and 400,000,000 folding cartons, although there is no indication as to how many of these units are produced by lithography and how many by letterpress. Checking on the display picture, we found that the better known firms in the cosmetic field use anywhere from 10,000 to 50,000 displays a year. From McKittrick's figures on the number of firms in the industry using displays, this would indicate a possible use of some 5,000,000 displays a year.

It is impossible to arrive at any meaningful figures on direct mail volume, booklets, pamphlets, package inserts, dealer helps, etc., as individual company policies differ too widely in this division of their advertising expenditures. However, in our opinion this is an aspect of the market that has barely been touched, especially by the litho industry, and might profitably be studied.

SO MUCH for general industry totals, and now we can turn to a series of case studies of individual companies. One concern, whose general policies seem rather representative of the small portion of the industry on which we checked, reported that all their labels were lithographed. They seemed particularly proud of the fact that these were produced by the stone process. Their box tops, too, on a number of their boxed packages were lithographed. Boxes and

There's glamour and sophistication in this display. Note the copy in the bands surrounding the figure, which, incidentally, are pink in the original. "Perfume is an underthing," it reads. The more one studies the competitive structure of the cosmetics industry, the more one is impressed with the selling power of that intangible something called glamour.



labels were both bought by one buyer, a woman.

Another female member of the staff bought window and counter displays, reporting that forty to forty-five different designs were used each year. The run on these display pieces ranged from 100 to 1,000. About half, she reported, were done by offset, and the other half by silk screen. For flashy, bold, poster treatment, we were informed, they ordinarily use silk screen. Incidentally, we found that silk screen is the principal competitor of lithography in the display division of the cosmetic field,—probably because of the relatively short runs, and the willingness of buyers in this field to pay any figure within reason to secure desired effects. In advertising a luxury product, where margins of profit are high, we should imagine that buying strictly on the basis of price would be at a minimum; and our findings in the cosmetic field bore out this general idea.

In the case of this account, their direct mail work is bought by their advertising agency. An interview here disclosed that they prefer offset in much of their work because of the soft effects obtained which seem particularly suitable for cosmetic advertising. Also the offset process, of course, allows use of the fancy antique paper stocks which are in keeping with the nature of the product. On one particular folder, though,—a lipstick color chart, they chose letterpress because they had to have the sharper and more brilliant effects which letterpress would give. A sharp distinction between shades was essential, it was pointed out, in such an advertising piece as a lipstick color chart. Another rather novel package enclosure which they are currently using in a make-up box is printed on thin tissue. In this case their choice was dictated by the difficulty of handling tissue stocks on the offset press.

Another firm, with the usual "Frenchy" line and the inevitable Fifth Avenue address, advised that they spent six to seven per cent of their annual take on printed or lithographed material,—split about four to five per cent letterpress and two per cent offset. The buyer in this case reported that he avoids offset wherever possible for he can never predict what he is going to get in the finished job until it is off the press. In letterpress, he remarked, he can see a finished engraver's color proof before the job is ever run. He indicated that the reason offset does not pay on the major part of his company's work is because too much of it is of the short run variety.

They use about 20,000 displays a year, most of them with a seasonal angle. These are bought from two to six months in advance of projected seasonal use, depending on how busy they are. Some of their packages are lithographed and all of their labels. They use occasional package inserts and also publish booklets giving beauty aids, make-up instructions, etc. One of the latter was lithographed up until a short time ago, but in view of recent changes in federal laws they have reverted to letterpress because of more frequent need for changes and consequent shorter runs.

One of the best informed male

(*Turn to page* 65)



"You, too, can have a glamorous youthful looking coiffure —". There it is again. Perhaps one of the first requisites for one who would like to sell this market would be a thorough understanding of what "glamour" is in the sense it is used today. Ask a dozen persons whose work is merchandising cosmetics and they'll each have a different answer.

A thoroughgoing analysis of all the controllable factors involved, from original copy to finished job

Variables in COLOR REPRODUCTION

By Herbert P. Paschel

THE early workers in color reproduction by photomechanical means soon realized the necessity for correcting separation negatives prior to printing. By using the separation negatives without altering or improving the tone value, the colors in the final reproduction were generally false or degraded. Research in the graphic arts in the early days was not very far advanced, with the result that the individual workers had their own opinions (and still do!) as to the reason for the necessity of color-correcting separation negatives. Numerous reasons were advanced which persist to the present day. The entire process of color separation work, including materials and technique, was blamed both wholely and in part. These early workers were entirely justified in their view-points but, because of their lack of knowledge and to some extent because of the inadequate materials at their disposal, blamed some phase of the process which, as a matter of knowledge today, is sufficiently accurate to eliminate it as a source of trouble. With extensive research work being conducted by manufacturers, technical foundations, universities and the like, we have available concise and accu-

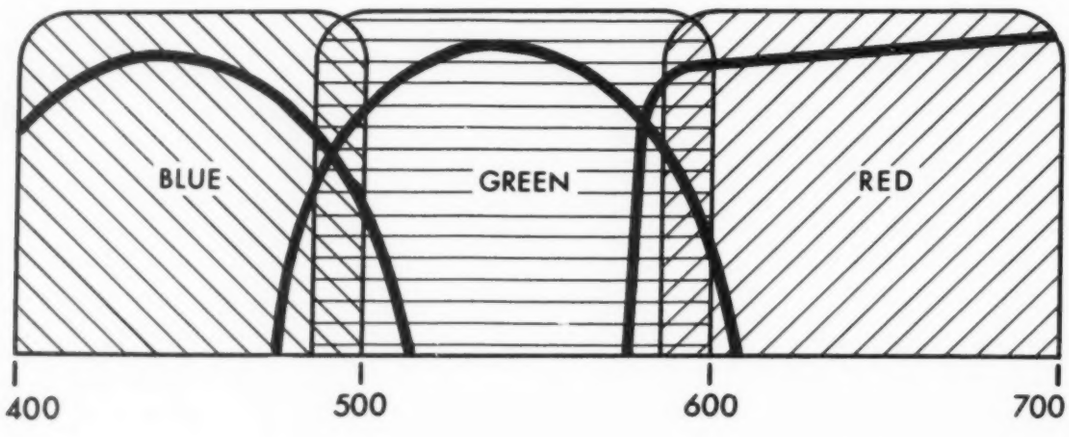


Fig. 2 Filter curves. The shaded areas represent the ideal or theoretical filters. The heavy black lines are the curves of the standard tri-color filters. The numbers indicate the wavelengths as measured in millimicrons.

rate information which show us exactly wherein present materials and technique deviate from theoretical requirements.

Lithographers may well face the fact that perfect color reproduction is an impossible achievement. The theory of three-color photography is based on the concept of pure color but pure color in nature simply does not exist. Every surface color we see is a "minus" color—so-called because it derives its color by subtracting from the light falling upon it certain rays of light and reflecting the remainder. Thus a yellow reflects all of the red and green, but very little or none of the blue, so it is actually "minus" blue. The artist tries to copy a scene or object with the pigments on his palette but, since he does not use the identical colors in the subject, his efforts are only an approximation. The lithographer tries to reproduce this painting with the trichromatic inks at his disposal — another approximation! The final result is an approximation of an approximation which brings us back to the old photographic axiom. "Every time you copy a photograph something is lost." This is as true in color as it is in black and white.

The originals submitted for color reproduction are themselves a major source of difficulty by reason of the spectral characteristics of the color media. Unfortunately the lithographer can exercise no control over the choice of color used to create such originals since they are usually handed to him in their finished form. If it were possible in the future to have all colored originals made with a selected and standardized group of colors, a lot of correction work would be avoided. Effective separation technique and automatic correction methods could be introduced which would compensate for the known deficiencies of such standardized colors. We are confronted with oil colors, watercolors, crayons, pastel and air brush colors, etc., made in countless numbers by a variety of manufacturers. Since copy matter is often obtained from all parts of the world, the standardiza-

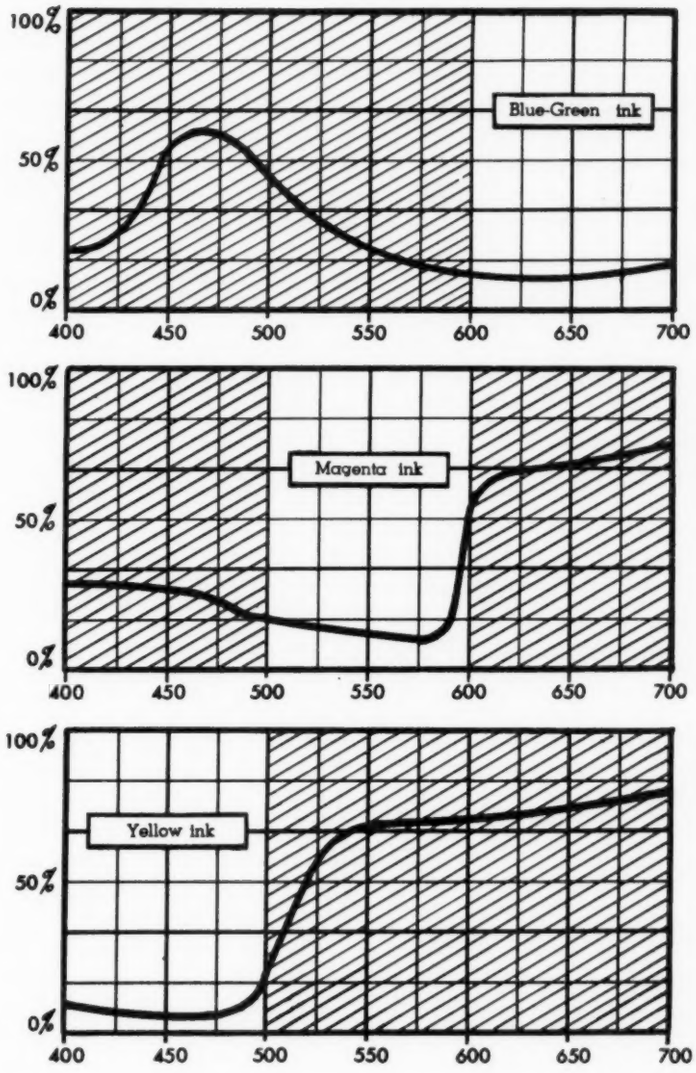
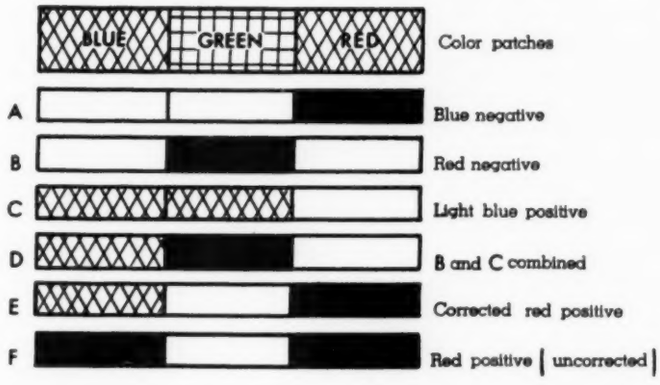


Fig. 1 Reflection curves of tri-color inks. The shaded areas represent ideal or theoretical printing colors. The black lines are the curves of an average group of trichromatic inks.

Fig. 3 Schematic representations of the effect of masking. The shaded areas in cases C, D & E indicate intermediate densities, or those which fall somewhere between highlight and shadow densities.



tion could not be local but would have to be universal. Within each group are many colors that are visually identical but, when placed before the camera, react quite differently. The experienced color worker knows only too well the varying technique necessary with different forms of color media and has undoubtedly experienced difficulty in applying the same technique to different copies in the same medium.

Let us examine how the spectral characteristics of the colors embodied in an original may influence the density values in a set of color separation negatives. Supposing the copy contained yellow which had the same color reflection as the yellow ink illustrated in Figure 1. The character of this particular yellow would make hand retouching an absolute necessity. In the yellow printing negative (continuous tone) we would need a minimum density wherever maximum yellow is present in the copy. In a yellow halftone negative the dots should be of minimum size in the areas corresponding to full strength yellow. From this particular yellow, the record in either the continuous tone or halftone negative would be decidedly incorrect. The yellow in question does not effectively absorb all the blue rays of light so that, when masking the yellow printing negative through the blue filter, we find that both the blue and yellow areas in the subject are reflecting blue light. The blue reflection by the yellow is of course slight but yet sufficiently intense to record in the negative.

A different filter will not alleviate matters since we are confronted, not with the failure of the filter, but with an impure color. As soon as a filter is introduced in the path of light striking the sensitive plate, we are working with monochromatic light. The camera no longer sees the subject in its entire range of colors but only in different intensities of light of the same color. In the instance cited, the camera records the yellow and blue areas as blue light of different values. A filter capable of absorbing the blue light reflected by the yellow would also absorb some of the blue rays reflected by the blue areas and thereby distort the separation values. It is evident from the character of the magenta and blue-green inks that similar colors in the copy would also introduce a distortion of the separation values.

THE influence of impure colors in the copy on the separation negatives can only be overcome by handwork done by an individual who is able to interpret color value into tone value and vice versa. In the case of the "indirect method" a majority of the retouching can be made on the continuous tone negatives and positives. If the deep etch method is to be used, the retouching may be partly made on the continuous tone negatives and then partly on the halftone positives by dot-etching. When making "direct" halftone separation negatives for straight albumen printing, a desirable procedure to follow is to shoot the halftones slightly higher than necessary and then reduce by dot-etching the areas that need reduction. The color deficiencies of the copy may influence a normal halftone to the extent that certain areas may lack the desired dot size. By shooting higher, most of the tone values will lie in the correct region and the few that do not can easily be cut back. Obviously too, it is easier to reduce dot sizes in a halftone negative than it is to increase their size.

Color filters were widely blamed in previous years, and are to some extent even today, as being the reason for deficient color separation negatives. It was and is contended that the cut or transmission of tricolor filters was so wrong that for this reason alone color corrections had to be made. The theory of color photography states that the visible spectrum should be broken up or separated into three equal parts with only a slight overlap to insure complete coverage. If the filters did not overlap, the intermediate regions would be reproduced as black. If too great an overlap existed, the intermediate bands would be greatly diluted and falsified. In Figure 2 are shown the transmission curves of the ideal or theoretical tricolor filters as compared to the actual color filters. While it is evident that the actual filters deviate considerably from the ideal considerations, this deficiency is so slight as to be practically insignificant. It should be noted also that the human eye is not sensitive in the same degree to all of the colors in the visible spectrum. Certain improvements therefore would not be noticed or perceived by the human eye. It would suffice to say that the color filters are sufficiently accurate so that the necessity for color correction is not caused by them.

Also to receive a full measure of blame by early workers were the photographic plates and films. The first attempts to color-sensitize photographic plates and films were at best crude—the color sensitivity sometimes being of such poor quality that most of the separation had to be put in by hand. This is not true today since the color sensitivity of modern dry plates is of such excellent quality as to minimize or entirely eliminate them as a factor in the cause for color correction.

Purely photographic color printing processes such as, Carbro (pigmented gelatin), dye imbibition (Wash-off Relief) and Chromatone (chemical toning) are able to produce color reproductions with startling fidelity. These methods more closely fulfill theoretical requirements than do the photomechanical processes. The photographic processes excel because of the superimposition of color layers of varying tints. Unfortunately in photomechanical work the gradation is achieved by discontinuous elements (halftones) varying in size but of the same tint. Thus the variations in hue possible by variations in the depth of the color layers cannot be approximated by small saturated elements varying in size. An inherent fault of color reproduction processes is that these small elements are in some cases overlapping, in solid tints are actually superimposed while in other areas may be completely isolated. The color reproduction achieves its effect by reason of additive synthesis, subtractive synthesis and a combination of both—a decided deviation from the ideal requirements.

The halftone process cannot duplicate the same full range of tones possible in continuous tone. The inherent defects of the halftone process pass unnoticed in monochromatic reproduction. When color is introduced however, variations in luminosity become variations in hue and these are much more perceptible. As soon as the gradation balance of the three colors is disturbed, errors in the color balance will result. The utmost accuracy and discretion should be exercised when making halftone and continuous tone separation negatives and positives. Separation negatives that are incorrectly balanced may prove costly if attempts are made to overcome this deficiency by handwork. It is often better to remake them immediately than later to discover that the reproduction has suffered.

We come now to the mechanical end of reproduction work; i.e., platemaking and the actual printing. Regarding the plate-making operations or its influence on color reproduction, the materials involved cannot be considered as having *inherent* deficiencies, so that any distortion in color because of faulty press plates should be considered as *mechanical* deficiencies which can be overcome by the use of the proper technique. The final step of the process is of course the printing and here we have any number of factors that can influence the color result; namely, press difficulties, unsuitable paper and finally and most important the inks.

ANOTHER possible cause for distortion is the paper, which should, theoretically, be pure white, i.e., reflect completely the entire visible spectrum with a minimum of absorption. It is impossible to expect a paper to reflect 100 per cent of the light falling upon it but at least it should absorb all of the colors equally, thereby only reducing the intensity or brilliance of the final result but not distorting the color balance. Any distortion in color reproduction influenced by the paper stock should not be considered as a failure or deficiency of the three-color process. Such cases are voluntary departures from ideal requirements usually forced upon the lithographer through price considerations or customer's preference. Due allowance should be made in separation negatives, halftones, retouching and inks for the character of the paper stock.

The final and most important consideration is the opacity and spectral characteristics of the printing inks themselves. In Figure 1 we see the spectral curves of an average set of tri-color inks as compared to the ideal or theoretical printing colors. The blue ink is farthest from perfection since it absorbs more than one-third in the very region in which it should reflect 100 per cent. In addition it has a high reflection in the red region where it should absorb completely. The magenta or red ink is a trifle but not much better, since it should reflect completely in the blue and red regions of the spectrum whereas it reflects only about 30 per cent of the blue and about 70 per cent of the red; and in addition reflects a large percentage of the green which it should absorb completely. The yellow ink is nearest perfection and, if the other two were as good, more than 50 per cent of color corrections would be eliminated. It can be stated then that the deficiencies of the printing inks are the real or chief cause necessitating color correction.

The color deficiences of printing inks are not reflections upon the ability or progressiveness of ink manufacturers since the pigments must possess, in addition to the proper spectral characteristics, certain physical and chemical properties to make them applicable to the lithographic process. For example, some physical properties are light-fastness, transparency and freedom from bleeding; while chemically they must not exert any action on the paper stock or metal parts of the press nor should they exert any chemical action on the pigments of the other two colors. It is easy to see that the ink-makers are faced with considerations other than fulfilling theoretical requirements of the ideal tricolor inks.

A closer scrutiny of the deficiencies of the printing inks reveals that certain blues cannot possibly be reproduced. According to three-color systems, a saturated blue would be reproduced by a combination of blue-green and magenta inks. The blue ink in this case would have to reflect completely the wavelengths from 400 m/u to 600 m/u with a total absorption of the wavelengths from 600 m/u to 700 m/u; the magenta ink reflecting 100 per cent from 400 m/u to 500 m/u and 100 per cent in the region from 600 m/u to 700 m/u with a complete absorption between 500 m/u and 600 m/u. With such ideal inks 50 per cent of the blue-green ink would be blue, the remaining 50 per cent would be green while the magenta ink would consist of 50 per cent blue and 50 per cent red. When two such inks are superimposed full strength, the red element of the magenta ink would be nullified or absorbed by the green component of the blue-green ink. Thus the remaining part of each ink which is blue combine to form a saturated blue.

The available trichromatic inks make the fulfillment of this synthesis impossible, since the blue-green ink reflects insufficient blue, and the magenta ink so little blue that the two combined would give a decidedly degraded result. The purples and violets generally suffer because of this condition. In the case of the greens, for instance, it is desirable for accurate reproduction of brilliant greens to overprint a yellow which completely absorbs blue with a blue-green which completely absorbs red. In this case the desired effect would be obtained by virtue of the yellow ink absorbing the blue component of the blue-green ink, and so the remaining green components of each ink combine to give us the correct green. However, the available yellow ink reflects too much blue and the blue-green ink does not reflect enough green.

Therefore when those two inks are over-printed, there is very little green light that can be reflected and the resultant green is either bluish or dull and degraded. The reds also suffer. A red should be reproduced by overprinting full strength yellow and magenta inks. Since the yellow re-

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PRINTED SHEETS

By Fred A. Hacker*

THE printing industry, including typographic, offset and gravure, has made most commendable progress during the past five years. This forward stride has been prompted by various important forces:

1. Modern mass production methods have demanded presses in faster and faster speeds.
2. The advertiser has demanded new and novel effects in color, paper, inks, bindings, approved printing mediums such as metal, wood, leather, cloth, cellophane, odorless inks, yes, even inks with a specific suggestive odor.
3. The artist with his unusual and attention-compelling devices, and the photographer with his striking effects and daring composition— in black and white as well as color photography—and the demands of both artist and photographer for more and more faithful reproduction of copy, have contributed their bit to put us all "on our toes" in an effort to do justice in reproducing the new, crisp and sparkling illustrations so prevalent today.

The non-offset gun is one of the newer pieces of equipment, and the spraying of printed sheets is a new process which made it possible for both printer and lithographer to keep pace with modern production methods and materials, and to take advantage of:

1. The higher press speeds being offered by the press manufacturer.
2. The new gloss inks and metallic inks made available by the ink manufacturer.
3. The new coated two-sides paper which it is now possible to use on lithographic offset presses without danger of offsetting or sticking.
4. A wider use of glassene, cellophane, metallic papers, and many other materials which heretofore presented difficulties in the pressroom.

The process of spraying printed sheets in the pressroom has become quite general. Thousands of spray guns have been placed in both letterpress and offset plants and are being profitably used, with highly satisfactory results. It has been proven conclusively through use in many plants, that the non-offset gun:

1. Permits greater press speeds.
2. Eliminates slipsheeting and definitely prevents offsetting.
3. Permits stronger color being run.
4. Eliminates to a great extent the hazard of static.
5. Permits running varnish and gloss inks with safety.
6. Forces the drying—or surface setting—of inks to permit quicker back-up and running of succeeding colors.
7. Permits the use of coated two-sides stock on lithographic offset presses.
8. Assists in jogging sheets, folding, cutting, binding.
9. Liberates moisture beneficial to a great extent.
10. Permits trapping of colors without danger of offsetting. First color can be run with as little drier as possible, to keep color "open", and to trap the next color properly.
11. In general, does away with many of the troubles which heretofore have been a nightmare to the pressman.

The spraying of printed sheets is important and pressmen should thoroughly familiarize themselves with this equipment and learn properly how to adjust and operate it. Through the proper use of non-offset guns you obtain better production and a higher quality of printing with less worry. The most important point in the successful operation of the spray gun is

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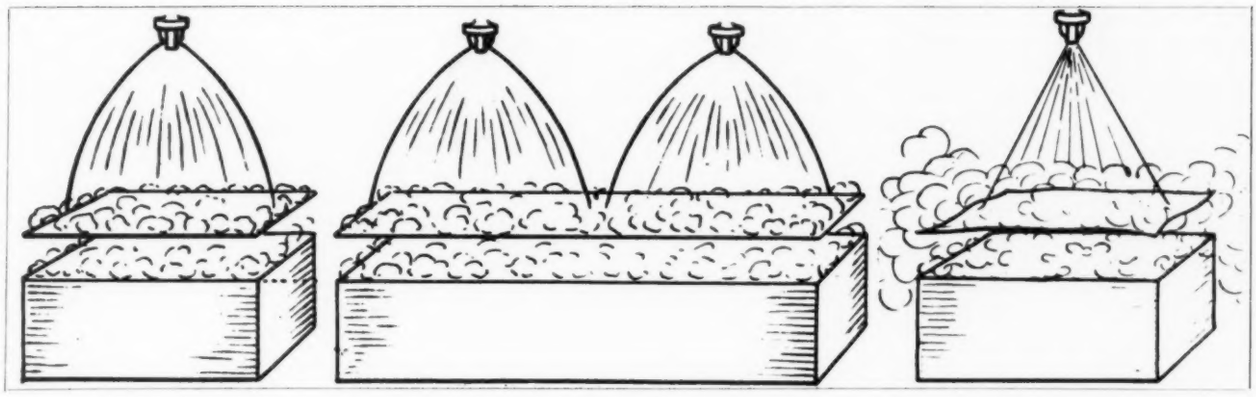


Fig. 1 Fig. 2 Fig. 3

to use a minimum amount of air and a minimum amount of solution (called mix), and more air when necessary. Attention should be given to proper height of the gun from the sheet, proper amount of air and mix to use, size of particles to be sprayed (whether large or small), the treatment for different kind of stock, type of mix most suitable for different jobs, and the correct timing of the spray in relation to movement of the sheet.

In order to produce best results the pressman should thoroughly acquaint himself with this equipment and how to make the five principal adjustments, as follows:

1. Height of gun.
2. Amount of air.
3. Amount of mix.
4. Width and direction of spray.
5. Duration of spray.

If the gun is properly adjusted offsetting will be prevented even though the spray can scarcely be seen.

1. *Height of Gun.* The height of the gun is dependent on the size of the sheet to be treated. The minimum height should not be less than 18″ to 20″ from the sheet while the maximum height is governed entirely by the size of the sheet and the nature of the job. As a general rule, the height of the gun should be equal to approximately the length of the sheet or just a few inches lower than the length. If heaters are used the gun can be placed slightly lower because the heat naturally assists in the drying of the particles. Another good rule to follow is to have the gun at such a height that the particles will just cover the area to be treated. By looking at the sheet, eye level, it can be observed whether the particles are covering the sheet properly. See Figures 1 and 2.
2. *Amount of Fluid.* The non-offset gun should have a positive adjustment for the amount of mix. In Figure 4 a very simple mix adjustment is shown. By turning the mix adjusting lever counter-clockwise the amount of mix is increased; by turning it clockwise the amount of mix is diminished. It is always best to start with as little mix as possible as only a small amount is needed even for the most difficult jobs, provided the particles are of the proper size and are delivered to the sheet in a dry form.
3. *Amount of Air.* Air is used principally to atomize the mix and to break it up into small globular particles. A large amount of air and a small amount of mix will naturally produce smaller particles, while a small amount of air and more mix will produce larger particles. The non-offset guns should be equipped with an air regulator and dial showing the number of pounds pressure of air being used in the atomization of the mix. The amount of air pressure used varies from 30 to 40 pounds. Proper air pressure pro-

Fig. 4

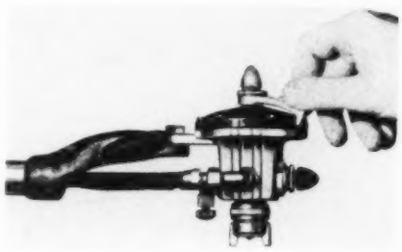


Fig. 5



Fig. 6





Fig. 7



Fig. 8

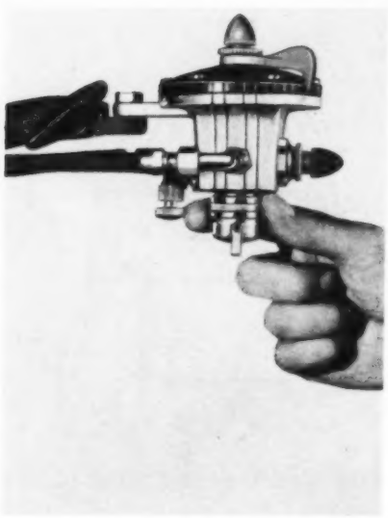


Fig. 9

motes cleanliness. (Refer to Figure 3.) If too much air is used the mix will be blown off the sheet and around the press. Low air pressure keeps the mix confined to the sheet area. Figure 5 shows the air regulator mounted in the material container support. The dial indicates the amount of air flowing to the gun. By turning the adjusting screw clockwise the air pressure is increased.. . Turning it counter-clockwise decreases the pressure.

4. *Shape of Spray.* Most non-offset guns also have a positive adjustment for the shape of spray. Refer to Figures 6, 7 and 8. In this particular type of gun, turning the spray shape adjusting screw clockwise produces a small circular spray. Turning the same screw counter-clockwise produces a fanshaped spray of varying widths, depending upon the width of coverage desired. Controlling the proper shape of the spray promotes mix economy. Refer also to Figures 9, 10 and 11. By turning the side-ports of the nozzle this fanshaped spray can be brought to any position over the sheet, either crosswise, lengthwise, or diagonally, as desired for the job in hand.
5. *Duration of Spray.* This can be controlled in two ways—either by means of the cam operating the control switch, or by means of a check valve in the air line, or both. Figure 12 shows a check valve located within the gun head and easily adjusted while the gun is in operation. Turning the adjusting screw clockwise shortens the duration of spray and turning it counter-clockwise lengthens the duration.

IN ADDITION to understanding the adjustments, the following paragraphs will explain their function:

The nature of the job and the kind of stock used will determine the size of particles to be used. For coated papers small particles are desirable, while for rough surfaced stock, box covers, cardboard, antique paper, etc., large particles should be used. The larger particles, as shown in Figure 13, are produced by using less air and more mix, while the smaller particles, as shown

Fig. 10

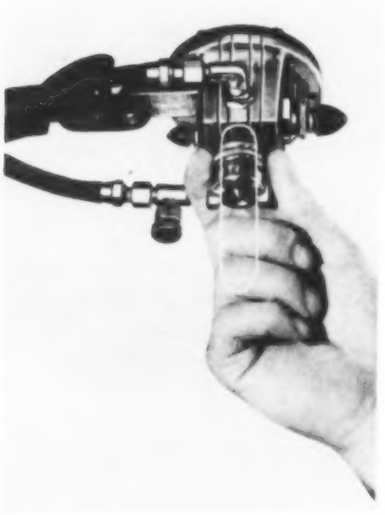


Fig. 11

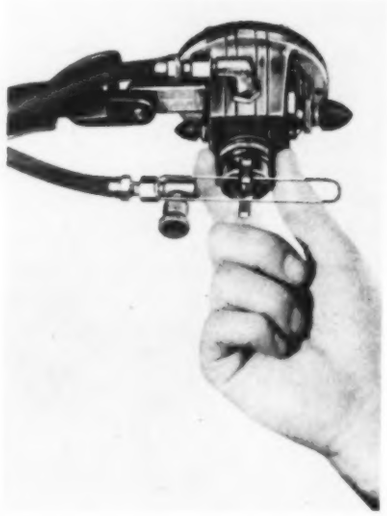


Fig. 12



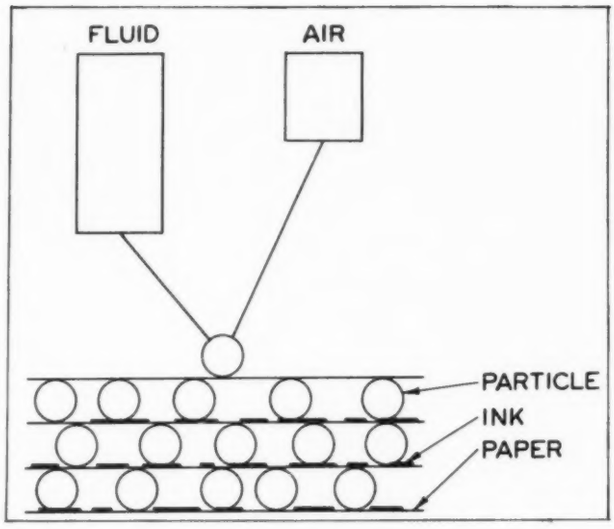


Fig. 13

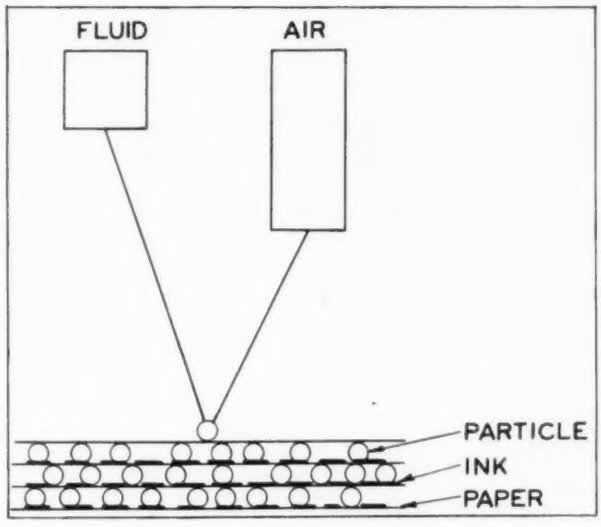


Fig. 14

in Figure 14, are produced by using more air and less mix. At all times it is important, regardless of the size of the particles used, that the atomized particles be delivered to the sheet dry. A good test for dryness is to spray the atomized mix on the back of the hand with the palm resting on the pile of paper in the delivery. Dry particles, as shown in Figure 15, are round in shape and produce better separation of the sheets, while wet particles, as shown in Figure 16, are flat, rough to the touch, do not give sufficient separation to prevent offset and are objectionable. If the atomized particles are damp when they strike the back of the hand, then either one or a combination of several of the following five adjustments should be checked, viz:

1. Use more air.
2. Use less mix.
3. Raise the gun higher above the sheet.
4. Carry a wider spray so as to spread the particles over a larger area.
5. Be sure that your heater is burning efficiently.

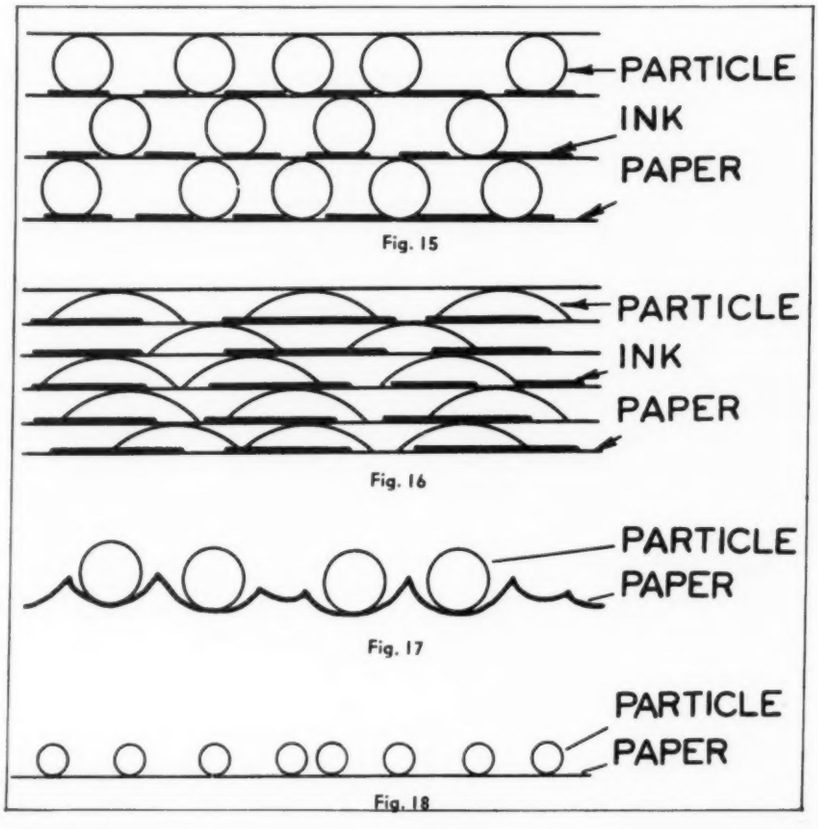


Fig. 15

Fig. 16

Fig. 17

Fig. 18

Mention is made concerning the large and small particles for different kinds of stock and that the gun can be adjusted to produce various size particles. This is true within the limits of the specific non-offset mix used. With a lighter mix certain sized particles are produced, while with a heavier mix larger and firmer particles are produced. See Figures 17 and 18. The heavier mixes are ordinarily used for cardboard, rough surfaced stocks, high gloss inks, overprint varnishes, metallic inks, cellophane, celluloid and glassene, while the lighter mix is used for coated paper and the general run of commercial black and white and color printing. Non-offset guns have been used successfully on all types of jobs and materials such as cellophane, celluloid, decalcomanias, folding boxes, box cartons, food wrappers, foil paper, varnish work, gloss inks, coated paper on offset presses, glassene products, greeting cards, labels, metallic inks, publications and magazines. This equipment has been installed on every kind of letterpress, lithographic offset press and specialty press.

Buyers of printing are today demanding strong color effects, real snap and depth in their halftone reproductions. They are satisfied with weak, washed-out colors. Non-offset equip-

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PAPER CONTROL

A discussion of the variables in papers for offset

By Frank R. Sloan*

WITH the development of lithography, it became increasingly evident that the paper for the process would have to be treated extra carefully throughout its manufacturing process, on through to its handling and conditioning, if successful results were to be obtained on the finished sheets. From the paper manufacturer's standpoint, these extra requirements were not of a nature requiring changes in the fundamental methods of paper-making; they were primarily problems of instituting exact control of all the variables desired by all concerned, the manufacturer, the merchant, and the lithographer.

The first requirement was to assure correct moisture-content in the paper, as it was well-known that the difference between a fine piece of lithography and a poor one or efficient press running and inefficient or costly press running, was often determined by the paper's moisture content. Some will argue that what is correct moisture-content for good running in plants in one locality is not satisfactory for good production in another. Hence, the problem was, and is, not a simple one. However, correct moisture-content for rag and rag-content bond and ledger paper has been pretty well established at 5½ per cent, and unless there is a very definite reason for some other amount, paper of these grades should be manufactured on that basis. It is interesting to note that over the period of a year, the relative humidity for the entire country averages practically the same. So, naturally, if the press room of a plant in the East had the same controlled humidity conditions of one in the West, a standard paper moisture-content should be satisfactory, and the paper should work equally well in both plants.

Nearly every lithographer is acquainted with the importance of correct *pH* in paper, but with all the new developments in inks, fountain solutions, etc., the proper acid and alkaline content of the paper becomes an even more important factor. Improper control of the contents of either property is bound to create trouble for the lithographer, and it is wise to bear in mind that papers manufactured only under absolute *pH* control will give the best finished results. A discussion of proper *pH* in paper could fill many more pages than even those of this periodical and there are many points open to argument. However, it is a definite fact that paper manufactured under improperly controlled *pH* conditions will be "the fly in the ointment" for the lithographer.

Supposing we start with a definition of *pH* so we all know what we're talking about. *pH* is the scientific term denoting the hydrogen ion concentration of a solution. But to one not versed in theoretical chemistry this probably doesn't mean much. Translated into more simple language, *pH* denotes the intensity of acidity or alkalinity of a solution. Mind you, this doesn't mean the total amount of acidity or alkalinity of a solution but rather the degree. Just as in heat measurement, we state the number of B.T.U.'s to give the total amount of heat, but speak of so many degrees Fahrenheit or Centigrade to indicate the intensity of heat. Just as in the musical scale, the notes indicate the pitch of the sound but don't indicate the volume. Just as on your radio you have tone control and volume control. The application of *pH* control gets considerable value from the fact that many processes and reactions are affected as much or more by variations in intensity of acidity as by variations in total acid-

"California, Here We Come!" is the general idea behind the new letterhead design of the Lithographers National Association, New York, which, in the insert, opposite, carries a proclamation by E. H. Wadewitz, president, inviting the litho industry to the 1940 annual LNA convention, scheduled for June 4 to 7, at Del Monte, Calif. Shown are Convention headquarters and the famous "black hole of Cypress Point", the treacherous 16th on famous Pebble Beach golf course. The special letterhead will be used by the LNA from now until after the Convention.

* Mr. Sloan is director of the newly-established Printing Research and Service Department of Whiting-Plover Paper Company, Stevens Point, Wis.



LITHOGRAPHERS' 1940 CONVENTION

LITHOGRAPHERS NATIONAL ASSOCIATION, INC.

WESTERN OFFICE 29 S. LASALLE STREET CHICAGO — 295 MADISON AVE. NEW YORK



CONVENTION HEADQUARTERS

CALLING ALL LITHOGRAPHERS!

to

DELMONTE, CALIFORNIA

"The Riviera of America"

JUNE 4-7, 1940

SPECIAL RATES FOR LITHOGRAPHERS' CONVENTION

MAKE RESERVATIONS EARLY DIRECT TO HOTEL DEL MONTE

—

FIRST WESTERN CONVENTION OF L. N. A. IN 16 YEARS. OUTSTANDING PROGRAM OF BUSINESS SESSIONS

—

WEST COAST LITHOGRAPHERS WILL BE OUR HOSTS AND WILL PROVIDE EXCEPTIONAL ENTERTAINMENT

—

LOW ROUND TRIP RAILROAD RATES, ALSO SPECIAL CONDUCTED ROUND-TRIP, LOW-RATE, ALL-EXPENSE-PAID TOUR

—

YOUR GOLDEN OPPORTUNITY TO VISIT TREASURE ISLAND SAN FRANCISCO WORLD'S FAIR

—

SEE AMERICA: COMBINE BUSINESS WITH PLEASURE . . . A GRAND FAMILY VACATION . . . "CALIFORNIA HERE WE COME"

LITHOGRAPHERS' TRAVEL AMERICA YEAR

A Proclamation

Whereas, the exigencies of international conflict and the designation of vast combat areas may be expected to discourage travel by AMERICAN LITHOGRAPHERS to the areas involved, and

Whereas, the Convention of the LITHOGRAPHERS NATIONAL ASSOCIATION INCORPORATED is annually the meeting place of Lithographers from all sections of the country, and

Whereas, said Convention offers the one great opportunity for Lithographers to discuss industry problems, to meet competitors on friendly terms and to renew and to extend business friendships and acquaintances, and

Whereas, Franklin D. Roosevelt, President of the United States of America, did formally proclaim 1940 as TRAVEL AMERICA YEAR and did invite our citizens, and friends from other lands, to join in a great travel movement to promote sympathy and understanding,

Now, therefore, I, E. H. Wadewitz, President of the LITHOGRAPHERS NATIONAL ASSOCIATION INCORPORATED, do proclaim 1940 as LITHOGRAPHERS' TRAVEL AMERICA YEAR and do invite Lithographers generally, their wives and their families, their associates and their friends in the ink, paper, machinery and supply trades, to join together in a great ATTEND-THE-CONVENTION-AT-DEL MONTE movement so that we may take advantage of this opportunity to consider and to understand more fully this Industry's problems, to visit the outstanding beauty spots of America and to experience and to enjoy the thrill of Western Hospitality and Entertainment to be extended to us by our HOSTS, the PACIFIC COAST LITHOGRAPHERS.

In witness whereof, I have hereunto set my hand and caused the seal of the Lithographers National Association Incorporated to be affixed.

(Signed) E. H. Wadewitz

[SEAL]

By the President:

(Signed) W. Floyd Maxwell
Secretary

New York, N. Y.
March 1, 1940

Watch Association Bulletins: Don't Miss Convention Announcements

ty, just as in certain other chemical reactions, the degree rather than the total amount of heat is of greater importance.

Of several rather accurate methods of determining *pH*, probably the two most widely used are the colorimetric and the electrometric. As the colorimetric is a little simpler, we'll try to describe it briefly here: First of all, it should be understood that there are certain dyes that are very sensitive to changes in *pH*—that is, changes of *pH* will produce marked changes in the shades of these dyes.

Individual special dyes, known as indicators, usually show a distinct change in color for each tenth of a *pH* unit. Extensive research has developed a series of these dyes (which are not the dyes used in coloring paper and textiles) to cover the entire *pH* scale. Accurate color standards for every *pH* value are available in the form of solutions sealed in small glass vials. Now, in making the *pH* measurements, a definite amount of dye is added to a definite amount of the solution to be tested, and the resulting color is matched with one of the standard colors. The

(*Turn to page* 33)

Offset Paper at Work

The third in a series on offset paper by Mr. Wheelwright, editor of "Paper & Printing Digest" and author of "From Paper Mill to Pressroom." He is a member of the Technical Association, Pulp and Paper Industry, and also of the American Institute of Graphic Arts of which he is an honorary vice president.

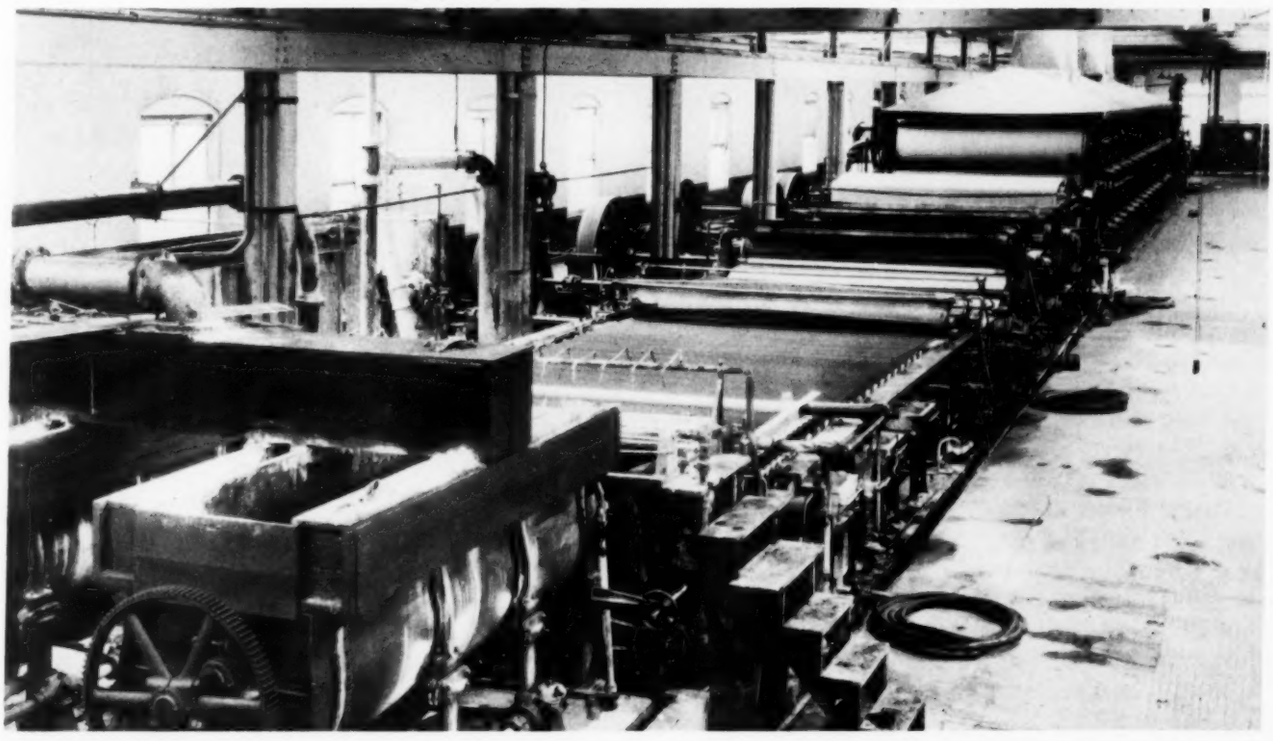
BY WILLIAM BOND WHEELWRIGHT

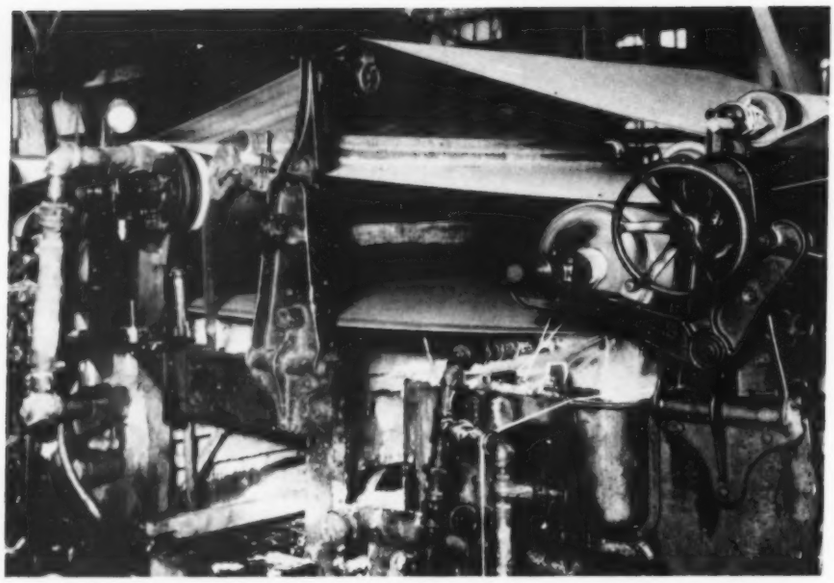
LET US turn our attention to a class of papers for which offset printing is especially well suited; namely, bristol boards. The definition for a bristol board as presented by the manufacturer to the Bureau of Standards reads: "Bristol board is a sheet of paper from six one-thousandths of an inch upward. It is made either on a fourdrinier or a cylinder machine. It is usually made solid, but may be made filled."

A "solid" bristol is one in which the pulp and other ingredients are the same throughout. A "filled" bristol is one composed of three or more stratas of pulp pressed together, in which the middles are of a different quality than the outstide layers. There is a third type of bristol, the "duplex," in which the outsides are of different colors.

Bristols may be made either on a fourdrinier or a cylinder paper machine. On the former, "solid" bristol

Wet end of Fourdrinier paper machine. Pulp flows from the screen in foreground to the head box visible by the step ladder. A shaking motion imparted to the frame of the Fourdrinier at a point near the head box, counteracts the tendency for all fibres to form parallel to the machine direction. The crossing of the fibres is governed by the shake and the speed of the machine.





Section of a four vat cylinder paper machine. The long endless felt is picking up successive webs from the respective moulds to be compressed into a single web. The stock may be varied in the moulds to make a cheaper middle, or a duplex board.

only can be made, because the web in the moist stage has to be formed in a single film of pulp. The "filled" boards have to be manufactured on multi-cylinder machines on which the wet webs from three or more vats are placed tandem. The outside vats are fed from different pulp chests than the inside, so that it is possible to furnish different qualities of pulp, or the same quality at will, to these vats. In making duplex boards the outside vats have to be so piped that different colors of pulp may be supplied to each.

Since paper "at work", both in conversion and eventually as converted, is affected by processing, it is important to understand the physical characteristics produced both on fourdrinier and cylinder paper machines. They differ considerably, with a consequent difference in the physical character of their respective products.

A fourdrinier machine forms its web on the surface of a long woven wire cloth always referred to by papermakers as "the wire." The wire is endless and passes over a series of "table rolls", which support it and keep it level from side to side. They also promote drainage of the excess water in which the suspended fibres are flowed evenly over its surface. Near the end furtherest from the flow box, suction boxes are placed below the wire which drags over them while the last traces of visible water are being withdrawn by the force of the suction. The wire finally passes around a couch roll which imparts sufficient density to the web to enable it to sustain its own weight and run without breaking down on to the endless felts which carry it through three sets of press rolls.

The frame upholding the wire is so constructed that a sideways shaking motion can be effected at a point where fibres are still suspended in water. This shake diverts some of the fibres from the direction they would otherwise assume in the current, causing them to lie obliquely in the body of the web. On account of the force of gravity of the water (which comprises about 98 per cent of the papermaking stuff), the bottom-most fibres are pinned down to the wire cloth without having an opportunity to feel the effects of the sideways shake. It is thought that in consequence the fibres adjacent to the wire, i.e. the "wire-side" of the paper are more nearly parallel to each other than the fibres deposited above them. Thus the physical structure of fourdrinier paper is not strictly homogeneous.

The transverse or diagonal direction of a portion of the fibres, helps to strengthen the sheet across its grain and prevent it from splitting so easily or evenly as would be the case were all the fibres parallel to one another. From certain points of view this sheet structure is advantageous, from others not so good. A knowledge of these characteristics may in many instances govern the choice either of a fourdrinier or a cylinder bristol.

Turning now to the cylinder product, as has already been mentioned it is composed of three or more webs of pulp coming from as many different vats or "cylinder moulds", which, being brought together between endless felts are subjected to pressure between a series of squeeze rolls and press rolls which causes the various plies to adhere. They emerge finally as either a "solid" or a "filled" board, according as the same materials or different ones are employed in the several vats.

The construction of a cylinder vat and its mould are relatively simple. A skeleton cylinder, with a wire-cloth covering is suspended upon bearings across the vat. The floor of the vat below the mould is rounded to conform with the circumference, leaving room for the papermaking stuff to surround it. The ends of the mould are closely fitted to those of the vat. An intake is provided to control the volume of stuff admitted, and an outlet with automatic valve to control the flow of the stuff away from the vat.

An endless felt runs tangent to the top circumference of the mould, and is held in contact to it by the pressure of a rubber-covered press roll. When the machine is put into motion, the felt acting like a belt turns the mould. The stuff is then admitted to the vat, and since a constant flow of the water passing from intake to outlet deposits its fibres on passing through the covering of the mould, it leaves a layer of pulp on the outside of the mould covering. As the mould revolves, this constantly forming web is picked up and carried away by the endless felt. This process is repeated as each successive mould is reached, one ply being "couched" upon another, until the full complement has been assembled so as to make the required thickness of of paper.

In this manner of forming paper there is no shaking motion sideways of the mould, as in the case of a fourdrinier wire. Consequently the tendency is for all the fibres at first to cling perpendicularly to the surface of the mould, and as they are attached to

one another in the formation of the web, their direction is parallel to that in which the mould turns.

The resulting product has a very marked grain direction. Tear a sample of cylinder board with the grain and the line of cleavage is pretty straight. Tear another sample from a fourdrinier sheet with the grain, and the torn edge will be found quite irregular. Fold these samples with the grain, and again across the grain and the effects of these two different constructions is decidedly apparent. The cylinder board folds cleanly in the grain direction, and crookedly crosswise, the surface fibres even breaking open. The fourdrinier bristol while not folding so neatly with the grain, folds less crookedly and less brokenly across the grain. The tearing of the samples both ways of the grain further emphasizes the structural differences. Bending them in both directions discloses more flexibility across the grain of the cylinder board, and more stiffness against the grain. In the fourdrinier bristol similar characteristics exist, but to a lesser degree. A card cut grain long out of a cylinder bristol will have more snap than one cut similarly from fourdrinier bristol.

In our next discussion examples of the applicability of these properties to conversion processes, and to converted products will be discussed.

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Paper Control

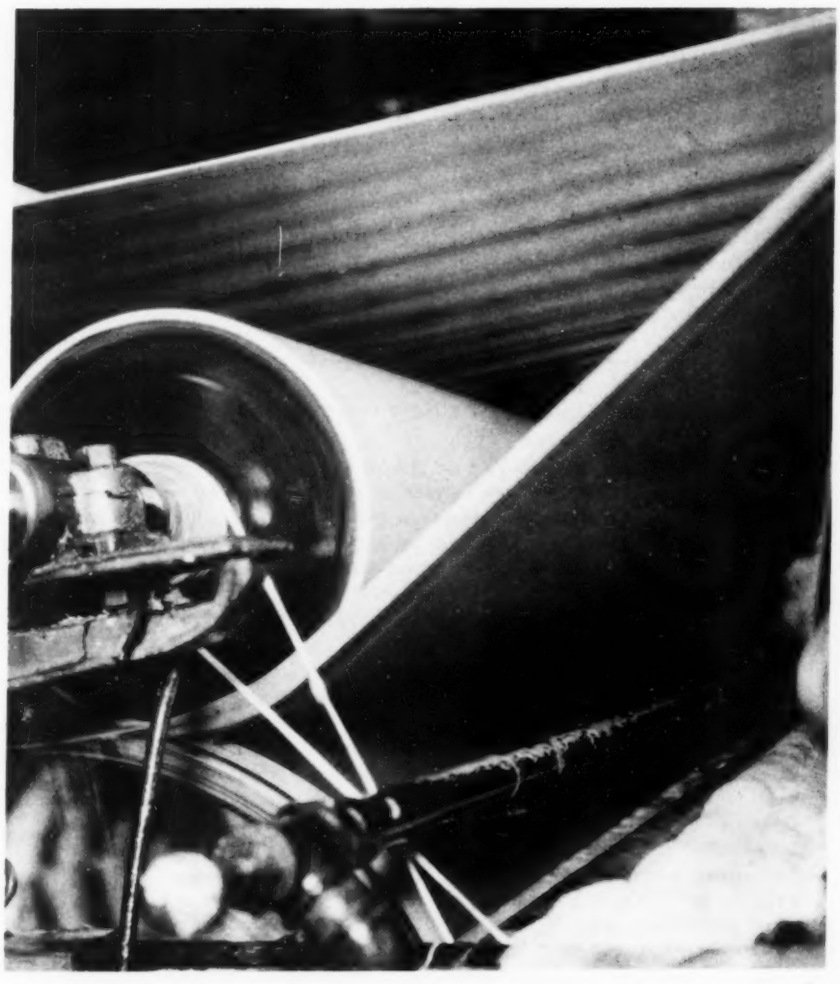
(*From page* 31)

pH of the solution being tested is then known to be the same as that of the standard.

You probably know that paper-making is made complex by the tremendous number of variables that must be controlled. To give you an idea of just how complex it is—one of the builders of paper machines claims that there are more than 80 variables on the paper machines alone—to say nothing of the variables in prior and subsequent operations. Obviously, the greater number of variables that can be effectively controlled automatically, the more care and attention that can be given to those variables which must still be humanly controlled. It is that end that paper manufacturers have in view when they incorporate an improvement like *pH* control into their manufacturing processes. In addition to the value of automatic *pH* control mentioned above, there is the much more vital consideration—the actual effect of closely controlled *pH* in the paper-making process. It is definitely known that the degree of acidity of paper affects its lasting qualities. Recognizing the importance of proper *pH* control, the United States Government usually specifies a minimum *pH* in its paper purchase contracts. Likewise, all properly manufactured papers are made under positive *pH* control.

The matter of *pH* control, while extremely important, is just beginning to receive proper recognition. The use of papers of the proper *pH* can eliminate many press-room difficulties. Of course, there are difficulties that do not originate in the paper.

Close-up of a cylinder mould showing the web after being picked up under the pressure of the couch roll above. Web appears adhering to bottom of the endless felt. The grain in paper board runs in the general direction of the rotation of the cylinder mould.



ANOTHER very important factor in furnishing rag-content bond and ledger papers to the lithographer is that of having properly seasoned or conditioned paper. This is one step in good rag-content paper manufacturing that requires no intricate control processes or equipment, for the bulk of this job is done by Mother Nature. After the paper has come through the mill, where it has been manufactured under perfectly controlled conditions, checked at regular intervals, and inspected for uniformity, it is packed and left "to season" for as long a period as possible. The minimum seasoning peri-

(*Turn to page* 55)

IN AND ABOUT THE TRADE

New Ben Franklin Press

H. J. Tuckett, former vice-president of American Printing & Lithographing Co., Seattle, has organized Ben Franklin Press at 511 Virginia St., that city.

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New Strauss Lithographing

Martin Strauss, formerly with Academy Photo Offset Division of Gerson Photo Offset Co., New York, has established Strauss Lithographing Co., at 205 West 19th St., that city, to specialize in color lithography.

•

Approves Reorganization Plan

Reorganization of Hammer Dry Plate and Film Co., St. Louis, has been approved by United States District Judge Charles B. Davis, in accordance with plans for a new corporation offered by the concern. The new company offered to assume an obligation of $30,000 owed to the Reconstruction Finance Corporation and to offer a stock issue the proceeds of which would be used for the reorganization, and to provide working capital. Unsecured claims under $400 each, totaling $2,956, would be paid in cash, and larger unsecured creditors, with claims totaling $71,777, would receive 15 per cent cash and the remainder in preferred stock and notes, according to the approved plans.

•

To Address N. Y. Litho Club

Paul Rose, manager of Carrier Corp., Syracuse, N. Y., and Robert T. Williams, vice-president, Adams Engineering Co., will address the March 27th meeting of the New York Litho Club at the Builders Club, 2 Park Avenue, New York at 6:30 o'clock, March 27th. Both will talk on air conditioning in the lithographic plant, covering in detail requirements for the camera room, the press room and plate making departments. Following their talk, a round-table discussion will be held in which all present may participate. All interested members of the lithographic industry are invited to attend. The following month, in April, Harry Porter, vice-president of Harris-Seybold-Potter Co., Cleveland, will talk on the latest developments in multi-color presses, ink and paper and how they can be of practical benefit to the lithographer. The date of this meeting will be April 24th, same time.

•

NAPL to Meet Sept. 26

The National Association of Photo-Lithographers, New York, will hold its eighth annual convention at the Palmer House, Chicago, Sept. 26, 27 and 28. Invitations have been extended to supply and equipment manufacturers to exhibit their products as in previous years.

•

Reports More Printing Firms

In a report issued last month by Mayor F. H. LaGuardia of New York in reply to charges that industrial establishments were moving out of New York City because of high taxes and a multiplicity of onerous departmental investigations, it was disclosed that 193 printing firms, employing 1,232 persons, either moved into the metropolis or started businesses in the city in 1939, compared with 166, employing 1,224, which had either moved from the city or gone out of business during the same period; a gain of 27 printing firms and 8 additional jobs in the industry for the year. The report also pointed out that the gains had continued since the beginning of 1940, showing that in January, 12 new printing establishments, employing 132 persons, either started business in New York or came from other parts of the country, while only 6 firms, employing 63 persons, had moved out of the city or folded up.

Of the 18 industries reported, the printing industry was fourth in the number of new establishments started in the city during 1939; fifth in the number of establishments discontinued in the city in 1939; fourth in the number of new establishments started in the city in January and seventh in the number of establishments discontinued in the city in January. Of the 18 industries, representing approximately 38,846 employees, the printing industry ranked

SEEKS INFO ON DEFUNCT PRIVATE PRINTING PLANTS

The National Association of Photo-Lithographers, New York, announces that it is interested in gathering a list of commercial business organizations which have installed private printing or litho plants for handling their own work, and then, for whatever reason, either inability to obtain competent personnel, inability to produce the kind of work consistent with their standards, failure to economize on costs, or whatnot, abandoned the private printing project and disposed of their plant equipment.

The list, which, in fact, will be a series of case histories of private printing and lithographing ventures, will be used to provide concrete evidence with which to test the merits, on all aspects, of the private printing plant vs. the purchase of printing and lithography from established printing and litho concerns. Following its compilation, the list will be made available to trade associations and other interested parties. Anyone knowing of private printing plants which have discontinued operation are invited to communicate with Walter E. Soderstrom, executive secretary of the NAPL, 1776 Broadway, New York, giving the name of the organization, the type of printing which was done, and the reasons why, if possible, it was discontinued.

seventh in the number of persons employed.

•

Assail Statements on Offset

Representatives of the lithographic industry have taken issue with the statement made in the New York press recently by Russell Forbes, Commissioner of Purchase of New York, that one way certain city printers were able to make profits, despite the lowness of their bids, was "to print by the offset process rather than by the letterpress process required for use of the Allied Printing Trades council label." Mr. Forbes made the statement upon receiving information from William B. Herlands, Investigation Commissioner, that an alleged ring of collusive bidders on printing had been victimizing the city.

One spokesman for the industry said "it is unfair and untrue for the Commissioner of Purchase of the City of New York to imply that work done for the city by the offset process is either less satisfactory than typographic work or is done under non-union conditions." It was pointed out that New York City and New York State departments all purchase a considerable quantity of material produced by the offset process, and that lithographic workers are organized in their own union, the Amalgamated Lithographers of America, which is a member of the A. F. of L., and that its label has been upheld as valid by the courts.

•

Anthony S. Busk Dies

Anthony S. Busk, president of New Era Mfg. Co., manufacturer of web offset presses, died last month. He was 56 years old and was stricken on a train while on his way to New Orleans. Mr. Busk was born in Copenhagen, Denmark, and came to the United States when he was a child. He became president of the New Era company four years ago. Surviving are his wife, a son and a brother.

•

LNA Sponsors Student Awards

The Lithographers' National Association, New York, is sponsoring an awards division in the annual student publications contest this year, held under the auspices of the Columbia Scholastic Press Association, to include lithographed publications. George Loder, president, National Process Co., New York; Harry H. Platt, president, Sackett & Wilhelms Lithograph Corp., Long Island City, N. Y.; and Robert Newcomb, executive secretary, House Magazine Institute, and president of Newcomb-Staab Advertising Agency, New York, are the awards committee for the new division. The winners were to be announced March 16th.

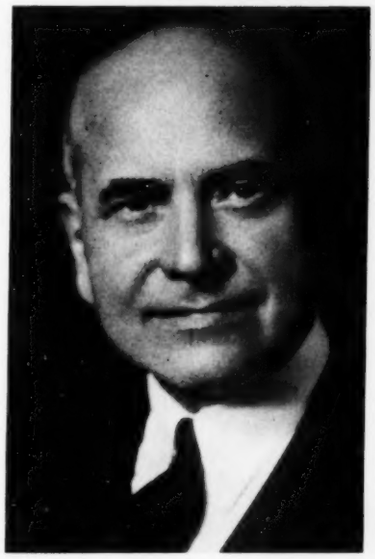
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American Colortype Co., New York, has declared, out of earnings from 1939, a dividend of 25c a common share payable March 25th.

•

Prism Print Co., formerly at Boston, has moved to 123 Bleecker Street, New York.

MODERN PIONEERS



WILLIAM C. HUEBNER



ALFRED F. HARRIS

IN COMMEMORATION of the 150th anniversary of the American Patent system the role of the American inventor and research worker in creating new jobs and raising the American standard of living by developing new products was acclaimed all over the country last month by honoring some 500 living inventors and research workers. Hailed as "modern pioneers" they were presented with scrolls of honor in token of distinguished accomplishment at a series of well-attended dinners and celebrations sponsored by the National Association of Manufacturers.

So honored as "modern pioneers" were Alfred F. Harris, chairman of the board, Harris-Seybold-Potter Co., Cleveland, for his development of methods and machinery of the offset lithographic method of printing; and William C. Huebner, technical engineering counsel, Lanston Monotype Machine Co., Philadelphia, for his development of the photo-composing machine and research work in the graphic arts. "Men like you," extolled Dr. Karl T. Compton, president of the Massachusetts Institute of Technology, who headed the group of distinguished scientists who made the awards, "personify the pioneering spirit which has made America great and which has given this nation its leadership in science and technology."

Theatrical Poster Firm Celebrates 50th Year

LIBERTY Show Printing Co., Pittsburgh printing and litho firm, is this year celebrating its 50th anniversary. Harry M. Smith, president, recalls that in 1880 his father, Edward L. Smith, was foreman for Nevin, Gribben & Company, job and show printers. The Nevin of the firm was a brother of Ethelbert Nevin, the famous composer. The legitimate theater was in its heyday. Advance agents not only booked their own attractions, arranged transportation and hotel accommodations for their companies, but ordered 24-sheet posters and other printing, as required, in towns along the road where adequate printing facilities were available.

Edward L. Smith, in 1890, took over Nevin, Gribben & Company, and established his own firm, calling it Liberty Printing Company, Show Printers. His business was 95 per cent theatrical and 5 per cent commercial. Today, with the decline of the legitimate theater, the ratio is reversed. Over 90 per cent of the work turned out is lithography for commercial concerns. Since about 1920, except for occasional one-sheet posters and window cards, printing for the legitimate theater has been done in New York. Motion pictures have used only small stuff, also printed in bulk at a central point. Recently, however, Mr. Smith observes, a few independent producers have gone in for pictorial 24-sheet posters, but they are not made on the road. Just as the stylist today has revived the bustle for women's wear, styles in theatrical printing, in fifty years, have completed a cycle. From time to time, in the intervening years, there have been temporary flares of ornate type, but Liberty used much the same type for Earl Carroll's Vanities, playing the Nixon Theater during the week of February 19 this year, as it used to when Edwin Booth played the old Grand Opera House half a century ago.

As Edward L. Smith's sons left school they entered their father's business. Grandsons, in turn, joined the force. The roster now reads: Harry M. Smith, president; Raymond M. Smith, vice-president and superintendent; Frank A. Smith, secretary and salesman—all sons of the founder; Vincent H. Smith, sales manager; Robert R. Smith, salesman; Lambing Smith, apprentice—all grandsons of the founder. John J. Dolan has been press foreman since the founding.

One of the interesting happenings in Liberty's history was the creation of a Santa Claus head many years ago which has since become famous and a tradition. The original has been used down through the years every Christmas on posters. These posters have been much in demand throughout the United States and Canada. Such a flood of Liberty's Santas appeared in Western Pennsylvania in 1939 that two Pittsburgh daily newspapers sent reporters to interview Harry Smith and ran stories and pictures in their news columns. The second and third generation of Smiths, who make up the Liberty Show Printing Company today, have seen changes and developments undreamed of by the founder of the firm, and as each young Smith jumps into harness, he shouts, in effect, "Where do we go from here?"



Sons and grandsons of the founder, Edward L. Smith. They are, left to right: Vincent H. Smith, sales manager, grandson; Harry M. Smith, president, son; Robert R. Smith, sales department, grandson; Raymond M. Smith, vice president and superintendent, son; Lambing Smith, apprentice, grandson; and Frank A. Smith, secretary, son.

Poster produced fifty years ago when Edwin Booth played Pittsburgh.





FULL COLOR COVERAGE

KODACHROME transparencies are reigning favorites as color "copy." Eastman backs this popularity with a wide assortment of materials and equipment to assist in the making of accurate separation negatives, the crucial step in photomechanical color reproduction. Go over this comprehensive list with the requirements of your cameramen in mind.

Wratten C.T.C. Panchromatic Plates
Wratten Panchromatic Plates
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Eastman Infra-Red Process Plates
Eastman 33 Plates
Eastman Contrast Process Plates
Kodalith Orthochromatic Plates
Color Separation Guides
Photographic Step Tablets
Wratten Filters
Eastman Projection Anastigmat-K Lens
Eastman Transmission Densitometer
Eastman Color Temperature Meter
DK-50 Developer
D-8 Developer
Kodalith Developer
Kodalith Acid Fixing Powder

Further details concerning these products are in the catalog "Supplies and Service for the Graphic Arts." Order from your Graphic Arts dealer.

EASTMAN KODAK COMPANY *Graphic Arts Dept.* Rochester, N.Y.

Announces Promotion Plans

Continental Distilling Corp., Philadelphia, announces that it will shortly release to the trade a variety of sales helps and dealer promotion items, including window displays and decalcomanias, to tie up with its current newspaper promotion campaign. Among the headlines to be used in newspaper copy are "43,000,000 Proofs of Mildness," referring to the number of bottles of Cobb's Creek Blended Whiskey sold since it was introduced in May 1935; "Cobb's Creek Proved Mild 43,000,000 Times," and "Mildness Sold 43,000,000 Bottles of This Fine Tasting Whiskey."

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Penn Hotels Plan Promotion

The Pennsylvania Hotels Association announced plans last month for a new "inside" merchandising campaign consisting of blotters and direct advertising. The Association expects to distribute more than 250,000 printed pieces to member hotels, and to issue a new edition of the Pennsylvania State road map and the P.H.A. member hotel directory, some 50,000 of the latter being slated for printing. Also it was announced that another edition of "Live," a promotional magazine distributed to guests, will be printed carrying 60,000 additional messages to those registering in member hotels.

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Cites South American Markets

At the Chicago World Trade Conference held last month, South America was strongly emphasized as a primary source of foreign trade, especially since it is at present the only large area not caught up in the toils of war. A survey of the market possibilities for United States exports in the South American market disclosed the following ratings: Venezuela—good; The Guianas—poor; Brazil—good; Uruguay—poor; Argentina—good; Chile—fair; Paraguay—poor; Bolivia—fair; Peru—good; Ecuador—poor and Colombia—good.

Thomas M. Quinn, executive vice-president and general manager of Dorland-International, Inc., New York, estimated that American manufacturers have appropriated between $60,000,000 and $70,000,000 dollars for export advertising each year for the past four or five years. A large part of this money, he said, is spent on catalogs and other forms of printed matter. He pointed out that the newspapers and magazines of most Latin-American countries could not give the advertiser all that is desirable in the way of coverage, and other forms of media including outdoor advertising and car cards should be used to support the newspaper and magazine campaign. He pointed out also that an advance of money or credit, adequately supervised, could "literally create foreign markets".



National Process Co., New York, has announced development of a new process, known as "Napconversion," whereby four-color letterpress plates may be reproduced by offset lithography. Plates originally made for magazine advertising, as for example, the plates prepared by Cheney Cravats for the Saturday Evening Post shown above, may be used by the "Napconversion" process for lithographing window displays, counter cards, envelope enclosures and other dealer promotion material to tie in with the advertiser's magazine campaign. The process enabled Cheney Brothers to make all three sizes of the promotional material shown above from the original color plates. "Napconversion" can be produced in any size, any arrangement and lithographed on almost any paper, it is said. It is able to accomplish this by preserving the original dot structure of the plate so as to retain the hand work, etching, staging and burnishing performed by the photo-engraver. Reductions of as much as 33 1/3 per cent using a 120-line subject are regularly being accomplished, it is said, while enlargements present no particular problem. With the process, it is practical to select any part of a subject, reproduce it same size, or larger or smaller without loss of register; or even incorporate a new backgound. Advantages of the new process are, in addition to the savings in plate manufacture, decided saving in time through use of the step-and-repeat machine and because offset lithography is a pre-makeready process and production can be started much more quickly.



Metlak

Reg. U. S. Patent Office

OFFSET SILVER INK

Used to Lithograph this Fancy Wrapper on Litho Coated Paper and cut from 43x63 inch sheet from regular production run.

One Impression produced the Brilliant Result shown which has a Smooth, Opaque Metallic appearance not obtainable with dusted jobs.

Sheets piled without Offset Spray Equipment.

Use of Metlak Silver or Aluminum Ink is Economical because it eliminates Bronzing Operation with all its delays and troubles. Plants not so equipped can do Aluminum Printing with their own presses, and not be obliged to send out or refuse this class of work.

Metlak Silver Ink eliminates dust in your pressroom and Danger from Aluminum Dust Explosions. No free bronze dust on your work to come off in handling or to contaminate contents of packages.

Write for Bulletin No. 29.

✦

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HI-GLOSS+ OVERPRINT VARNISHES, HI-GLOSS+ ONE-IMPRESSION INKS

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TAB Expands Services

Action taken by directors of the Traffic Audit Bureau, New York, at its annual meeting last month resulted in an agreement with the Outdoor Advertising Association of America whereby the Bureau will expand its services to all of the properties owned by Association members. Under the new set-up, the Traffic group will no longer deal directly with individual Association members but the latter will be represented as a whole by their organization. Officers elected at the meeting were Henry Stevens, vice president of J. Walter Thompson Co., representing the American Association of Advertising Agencies, president; Albert Brown, advertising manager of Best Foods Co., representing the Association of National Advertisers, vice president; and Kerwin Fulton, secretary-treasurer of T.A.B. who was reelected. Dr. Miller McClintock will continue to serve as auditor.

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Albert Stettenbenz, Sr., Dies

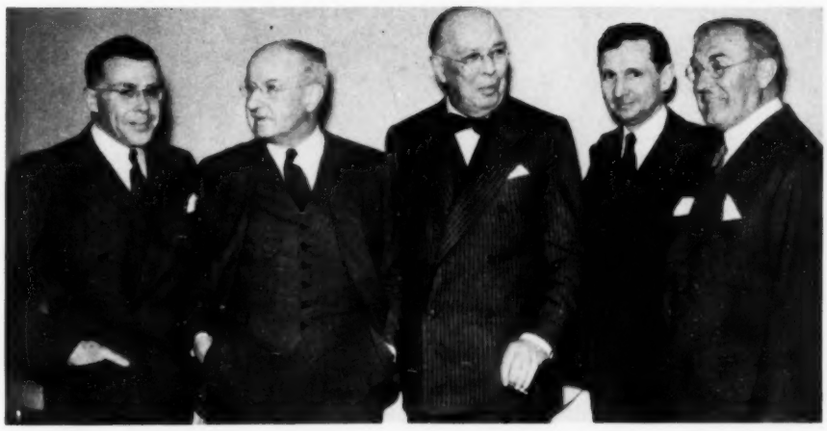
Albert Stettenbenz, Sr., lithographic artist and designer, of Buffalo, N. Y., died last month. He was 84 years old. Mr. Stettenbenz at an early age became a stone engraver and lithographic artist, pursuing this trade for approximately 60 years. For many years he was head of the art department of Hayes Lithograph Co. Later he had charge of advertising design at the Pierce-Arrow Motor Car Co. He also was associated for many years with Dennison Manufacturing Company for whom he executed special orders in design.

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Assn. to Celebrate 75th Year

The New York Employing Printers Association will celebrate 75 years of continuous trade association work in New York City at a Printing Progress Dinner to be held March 27 at the Hotel Commodore, New York. The dinner will also honor the 500th anniversary of the invention of printing. G. Lynn Sumner, president of the Advertising Club of New York, will give a talk, which will be followed by dancing and entertainment. One of the novel features will be the selection of the Queen of New York City Printing from photographs submitted of women now living in New York who were pictured in advertising material printed by letterpress, lithography or gravure in any commercial printing plant in New York since Jan. 1, 1939. Anyone, including printer, lithographer, advertising agency, photographer, advertiser, or the model herself, may enter the contest. The "Queen" selected will receive an award of $100.

Another feature of the Printing Progress Dinner will be an exhibit of mementoes of New York City printing since 1865. The exhibit will emphasize human interest aspects of printing in New York in the early days, by means of photographs and reminders of well-known personalities in the industry. Following the dinner the exhibit will occupy the new Arts Gallery of the Advertising Club of New York until April 7, where it will be open to the general public. Among the members of the committee for the dinner are: A. J. Fay, National Process Co., president of the New York Photo-Lithographers Assn.; D. R. Morean, American Colortype Co., president of the Eastern Lithographers Assn.; and A. O. Eldridge, Triangle Ink & Color Co., president of New York Printing Ink Makers Assn.



W. S. Forbes (second from left), president of Forbes Lithograph Co., Boston, and other guests at the opening of new Boston office of Crowell-Collier Publishing Company last month. The others are, left to right: J. B. Scarborough, American Magazine; then Mr. Forbes and next to him, Tom Beck, president of Crowell-Collier Publishing Co.; Sumner Blossom, editor of American Magazine; and J. D. Hooley, New England manager, Crowell-Collier Publishing Co.

•

Readers Vote for Photos

Walker Engraving Corp., New York, is distributing copies of its Research Report No. 4 revealing the preferences of *U. S. Camera* magazine readers for pictorial advertising copy. Of the 610 replies received in answer to the question, "Do you prefer drawings or photographs to illustrate an advertisement?" 598 voted for photos, while 10 chose drawings. In reply to the question, "Do you prefer drawings or photographs to illustrate a story?" 265 selected photographs while 299 voted for drawings. In response to the question, "Which gets your attention faster—one big picture or a series of smaller pictures that tell a story?" 502 replied in favor of one big picture, while 93 preferred smaller pictures. In reply to the question, "What type of photograph appeals to you more in advertising—posed or candid shots?" 379 said posed shots, while 226 were for candid shots.

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Fort Wayne Appoints Roberts

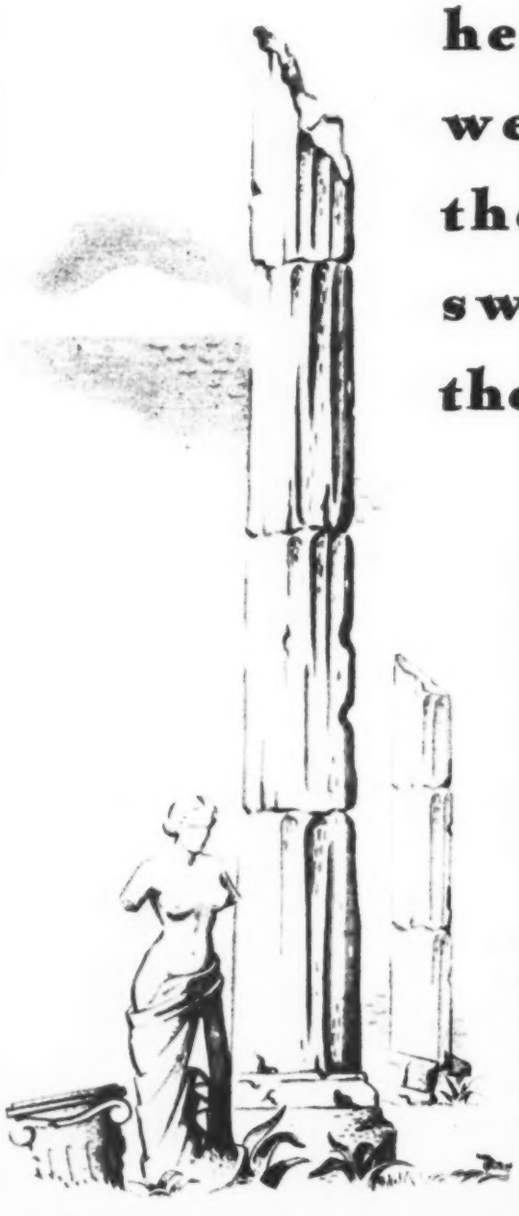
W. Herbert Roberts, formerly with Magill Weinsheimer Co., Chicago, was recently made general manager of Fort Wayne Printing Co., Fort Wayne, Ind., it was announced by William F. Graeter, president. He succeeds Hermann A. Heckel to the post.

•

Ernest H. Scott Dies

Ernest H. Scott, 45, foreman of the composing room of Democrat Printing and Lithographing Co., Little Rock, Ark., for 17 years, died last month.

Neither light nor heat, nor strain nor wear of press stays these rollers from the swift completion of their appointed rounds



THAT, to paraphrase, the inscription over the Central Post Office in New York City, describes ROBERTS & PORTER LEATHER DISTRIBUTION ROLLERS perfectly. Our files are filled with classic examples which bear eloquent testimony to their wear, their strength, their economy, their ability to stand up over the years (the average life of a ROBERTS & PORTER LEATHER ROLLER is better than ten years!) under even the most difficult conditions.

There's an everlastingness, a permanency, about ROBERTS & PORTER LEATHER ROLLERS that are sure to help smooth out the kinks in your operating expense sheet. They need no frequent recovering, there are no chips or composition to break off. Why not today, *now*, send us a set of distributors for recovering with smooth leather? See for yourself. We guarantee that they will be even, and know that you'll be pleased. The majority of lithographers can't be wrong!

ROBERTS & PORTER, Inc.

402 SOUTH MARKET ST.
CHICAGO
Phone: WAbash 6935

100 LAFAYETTE ST.
NEW YORK
Phone: CAnal 6-1646



"Joe's afraid of sharks."

Hold Packaging Parley

Representatives of leading food manufacturers and packaging machinery manufacturers met last month in New York in an attempt to find a solution to a recommendation by the government that the food and packaging industry inquire into the matter of "misleading packages." It was stated that the government felt that a legitimate problem existed in this direction but had refrained from citing any one firm. The food and packaging representatives pointed out that while many packages are not completely filled at the time of opening, due to chemical reaction or a settling of the content, at the same time as long as the label on the box showed a statement of the quantity, the customer was given sufficient protection. Any large-scale changes in packaging could only be done at a greatly increased cost, it was further stated, making necessary a rise in the cost to the consumer. Representatives emphasized, however, that their industries as well as the Federal government were anxious to avoid the possibility of court test on any product or products. In order, therefore, to further this policy, a committee was appointed for the purpose of conferring with W. J. Campbell, chief of Food and Drug Administration, Washington, on the subject. Ole Salthe was appointed consultant to the committee.

•

Bus Firm to Double Printing

Escorted tours by bus, an inovation in bus travel, will be the major theme of this year's advertising campaign of National Trailways Bus System, Chicago, it was announced last month. Last year's experimental national program, including much printed literature, resulted in more than a hundred per cent increase in all-expense tours, according to G. N. Goetzer, secretary. This year's printing program will nearly double last year's in which a million pieces of literature were distributed, according to Mr. Goetzer. More pieces will be offered, and they will be localized to make them more attractive in the regions for which they have been prepared, he said. A series of posters will also be displayed in all terminal stations. A national tour to both of the World's Fairs and return, from any point in the United States at a fixed price, will again be promoted, with a special campaign directed to school teachers.

•

Frank Merrill Seamans Dies

Frank Merrill Seamans, retired lithographic artist, former vice-president of Polygraphic Co. of America, Inc., New York, died last month. He was 70 years old. Mr. Seamans began his career as a lithographic artist with Russell Morgan Company, of Cincinnati. He later became manager of Otis Lithographic Company in Cleveland, and had served as vice-president of United States Printing and Lithographic Co., Brooklyn, before joining Polygraphic.

•

Defines Rules for Auto Copy

The Federal Trade Commission last month issued proposed trade practice rules for the automobile industry, which have much to say about the kind of advertising and sales promotion which should be labelled "unfair." The Commission proposes to outlaw any representations, either directly or indirectly, through pictures, displays, advertising or otherwise, that cars are sold or offered for sale with "standard equipment" when such is not a fact. Such advertising, it was declared, will also be termed unfair if extra equipment at additional costs is not mentioned.

•

To Address GPI Clinic

Faber Birren, well known expert on color, Julian E. Garnsey, color consultant for the New York World's Fair, and Frederic H. Rahr, research specialist in color, are the speakers who will address the first clinic in the series of Printing and Advertising Clinics currently being sponsored by General Printing Ink Corp., New York. They will speak March 20th in the galleries of GPI at 100 Sixth Avenue. Attendance is limited to invitation only. Herbert Kaufman, advertising manager, is secretary.

•

Peerless Lithographing Co., Chicago, recently purchased a new Webendorfer 17 x 22 offset press.

PRIVATE LIQUIDATION SALE

Due to the withdrawal from the job and commercial printing business of the DeVinne-Brown Corporation, one of the largest printing firms in New York City, Payne & Walsh Corporation is offering to the industry all of the equipment now in those departments.

This equipment has been in use until March first, and is all in perfect operating condition.

OFFSET PRESSES:

MIEHLE No. 57, one-color, Serial No. 18764 41½x55½ (3 years old)

MIEHLE No. 57, two-color, Serial No. 18721-18722, 41½x55½ (3 years old)

HARRIS S7L, one-color, Serial No. 383 36x48

HARRIS S7L, one-color, Serial No. 384 36x48

FUCHS & LANG pull-over Litho Offset Transfer Press, 50x72

OFFSET EQUIPMENT:

Vacuum frame, pump and motor (44 x 56)
Gelb twin arc printing lamps
Whirler and motor
Fuchs & Lang litho hand press, serial 7180
Fuchs & Lang litho hand press, serial 7081
Litho stone 24 x 35
Plate wash tank, 52 x 70 x 10
Plate wash tank, 52 x 70 x 10
Pipe frame zinc plate rack, 900 hooks and rings
Eastman No. 1 Wratten safelight lamp
Eastman Kodak safelight lamp
GE interval timer
694 zinc transfer plates, 16#, 38½ x 50
DeVinne-Brown special 22 x 28 process camera, lens, stand and copy-board
Gelb pr. double arc lamp
Paragon negative dryer, gas heated

PAPER CUTTERS:

Seybold 65-inch, auto. clamp, power back-gauge, 10Z-F, Serial No. 8347

Seybold 40-inch, auto. clamp, 10Z, Serial No. B9178

Seybold 44-inch, auto. clamp, Twentieth Century, Serial No. 4713

Seybold 44-inch, auto. clamp, 10Z, Serial No. C8205

Seybold 44-inch, auto. clamp, Twentieth Century, Serial No. 4164

Serial 44-inch, auto. clamp, Twentieth Century, Serial No. 4045

Seybold 29-inch Three-Knife Trimmer

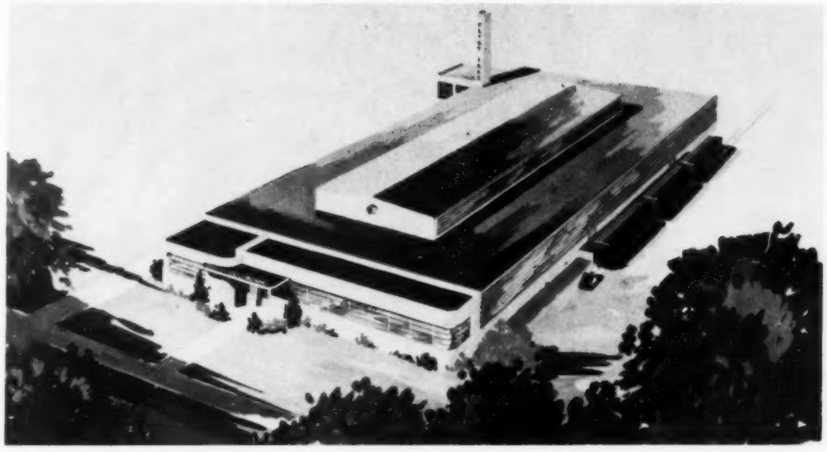
In addition to the above there are eighteen Model 8 Linotypes; ten Monotype casters and seven keyboards; complete composing room; thirty Miehle single- and two-color cylinder presses; two No. Two Kellys; six Kelly B presses; complete bindery including Dexter and Cleveland folders, single- and multiple-head stitchers, sewing machines, gang stitcher, gathering machine, punches, round-cornering machines, etc.; a complete gold-stamping equipment, and five ruling machines.

All of the above being offered for liquidation at very attractive prices

TERMS IF DESIRED WHERE CREDIT IS SATISFACTORY

PAYNE & WALSH CORP.

82 BEEKMAN ST., NEW YORK CITY, N. Y. TELEPHONE: BEEKMAN 3-1791



New Howard Flint ink plant at Houston, Tex.

New Flint Ink Plant in Texas

Howard Flint Ink Company announces that construction of a new modern ink plant is now under way at Houston, Tex. The new factory is expected to be completed by May 1. All types of printing, lithographing and newspaper inks will be manufactured. The factory when finished will be a one-story building, measuring 100 by 200 feet. The company has been serving Texas printers and lithographers from a leased factory location in Houston. The investment reflects the Flint company's confidence in the future of printing progress in the Southwest, it is said.

•

Address N. Y. Photo-Liths

C. V. Morris, editor of *Linde Lines,* house magazine of J. E. Linde Paper Co.; Albert Ellis, Barton Press, Inc., Newark; and O. M. Curtis, S. D. Warren Co., Boston, were guest speakers at the meeting of the New York Photo-Lithographers' Association held at the Tavern Restaurant, Newark, N. J., last month. Mr. Morris presented a dramatic presentation of sales ideas to help the printer and lithographer create more business. Mr. Ellis spoke on the importance of chemical solutions in offset printing and Mr. Curtis talked on coated papers for the lithographer.

•

Sloan Heads New Dept.

Frank R. Sloan, of the advertising and promotion department, Whiting-Plover Co., Stevens Point, Wis., has been appointed to direct the activities of Whiting-Plover's newly established printing research and service department. The new department has been added to provide service and counsel on the various processes of reproduction, inks, proper use of paper, and to keep Whiting-Plover's customers abreast of the changes and improvements in graphic arts techniques. A modern technical library will be maintained. Mr. Sloan received technical training in the printing department of Carnegie Institute of Technology, Pittsburgh, following which he conducted his own printing business for a number of years.

•

Charles Stockfleth Dies

Charles Stockfleth, lithographic artist, former vice-president of Newark Lithograph Co., and treasurer of Trade Laboratories, Inc., Newark, N. J., died last month. He was 70 years old. Mr. Stockfleth was graduated from the Stevens Institute of Technology, Hoboken, N. J., where he studied lithography and design. He was founder of Newark Lithograph Co., retiring from active participation five years ago.

•

Transfer "Little Giant"

Manufacture and assembly of the ATF-Webendorfer "Little Giant" offset press was transferred last month from the Webendorfer plant in Mt. Vernon, N. Y. to the main American Type Founders plant in Elizabeth, N. J. The transfer was made to facilitate production schedules. ATF announces that it has scheduled a series of demonstrations of the "Little Giant" offset press in some thirty printing centers throughout the country during March and April.

•

Phoenix Metal Marks 50 Years

Phoenix Metal Cap Co., Chicago, is this year observing its 50th year in the packaging industry. Among the achievements of which the company boasts is the part played in the development of metal decorating processes. In the January issue of *"The Phoenix Flame,"* house organ of the concern, this contribution to lithographic progress is referred to in the first of a series of commemorative articles reviewing the history and accomplishments of Phoenix since its organization (as Safe Glass Co.) in 1890. Lengthier treatment of the lithographic aspects of the concern's activities is promised for a forthcoming issue of the magazine, it was stated.

•

Holds Poster Design Contest

McCandlish Lithograph Corp., Philadelphia, is offering awards totaling $1000 for sketches for 24-sheet posters for Clicquot Club Ginger Ale or Club Soda, Heinz's Ketchup or Soups, Kellogg's Cornflakes, Philco Radios, or Servel Electrolux Refrigerators. Prizes are $500 for first; $300 for second; $150 for third; and $50 for fourth. All artists must submit their entries by April 15th. Following the judges decision, the winning posters will be displayed in leading cities. A copy of the rules governing the contest can be obtained by writing directly to McCandlish Lithograph Corp.

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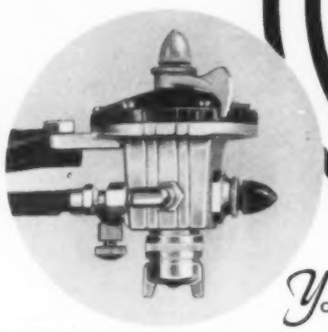
Packaging Conference Mar. 26

The Tenth Conference on Packaging Co., Cincinnati, on "The Package being held in conjunction with the Tenth Packaging Exhibition, opens at the Hotel Astor, New York, March 26th. Both are being sponsored by the American Management Association. The conference program this year, according to association officials, is one of the most comprehensive ever offered and will cover all phases of packaging as well as packing and shipping. Among the speakers are C. W. Browne, manager of marketing service, U. S. Printing & Lithograph-

Rifle Accuracy

Shotgun
Coverage
with New low-cost

ATF
Diafram
GUN





*You can aim at any part of the sheet, or get full-sheet coverage, to protect your jobs against offsetting with an ATF Diafram Gun. An even film of uniform dry particles is instantly available by simple fingertip adjustments, complete control of amount, duration and size of spray in *any* direction . . . anywhere on the sheet. The new ATF Gun has no electrical parts . . . operates entirely by air and therefore, costs less than ever before! Light and compact, it is easily moved from press to press, takes up less floor space. For lithograph or letterpress. Ask your ATF Salesman or Agent for complete details.*

American Type Founders
200 ELMORA AVENUE • ELIZABETH, N. J.
Branches and Agents in Principal Cities

USE INKS MADE TO YOUR LIKING

The responsible leadership and management back of every Sinclair & Carroll ink you purchase mean value to you over and above the price per pound. Sinclair & Carroll inks tell their own story by press performance and in the uniformly good results lithographers are obtaining with them throughout the country. They are manufactured under the supervision of men whose lifetimes have been spent in the development and perfecting of inks to their present high standard. Use a Sinclair & Carroll ink on your next job going to press. We will welcome an opportunity to cooperate with you and personally serve your ink requirements.

SINCLAIR & CARROLL CO., Inc.

LITHO INKS OFFSET

591 ELEVENTH AVENUE. Tel. BRyant 9-3566
NEW YORK CITY

CHICAGO	LOS ANGELES	SAN FRANCISCO	NEW ORLEANS
440 W. Superior St.	417 E. Pico St.	345 Battery St.	518 Natchez St.
Tel. Sup. 3481	Tel. Prospect 7296	Tel. Garfield 5834	Tel. Main 4421

ing Co., Cincinnati, on "The Package —A Vehicle For Consumer Messages;" Howard Ketchum, New York color designer, on "This Little Package Went to Market;" Jules Labarthe, Jr., Mellon Institute of Industrial Research, Pittsburgh, on "How Much Does the Label Weigh?"; Alvin E. Dodd, president, A.M.A., on "Packaging, A Job For Management;" D. S. Hopping, Celluloid Corp., New York, on "A Panorama of Packaging Progress;" W. R. M. Wharton, U. S. Department of Agriculture, on "Labeling Packages Under the Pure Food, Drug and Cosmetic Act;" and Faber Birren, New York color specialist, on "People, Packages and Profit."

Among those who will participate in the various packaging machinery and production sessions are George Welp, Interchemical Corp., New York; J. D. Malcolmson, Robert Gair Co., New York; G. T. Henderson, Hinde-Dauch Paper Co., Sandusky, Ohio; and G. A. Mohlman, Packaging Machinery Co., Springfield, Mass. Certificates of award to winners in the Irwin D. Wolf packaging competition will be presented at a luncheon meeting on March 26th.

•

Installs New 4-Color Press

National Process Co., New York, has just installed a new four-color Harris offset press, the only one of its kind in New York City. The new press has been added to take care of increased map production. It is expected that the big press will turn out over 10,000,000 road maps during the course of the next six months. Weighing 125,000 pounds, with overall dimensions of 43½ feet in length by 14½ feet in width, the machine will take a sheet 50 by 68 inches and produce work at the rate of from 4,000 to 5,000 sheets per hour depending on the type of job. Overhead lighting using 4-foot fluorescent tubes has been installed. The press has been insulated by means of wood and cork to prevent vibration. It is equipped with a wash-up machine, and neutralizers to prevent static.

The lithographed maps of Finland which are being produced for Finnish Relief are produced on National's new four-color offset press. The new maps, which are being produced free of charge and sold for 50c, the proceeds from which go to the Finnish Relief Fund, Inc., are the largest-scale and most informative maps of Finland ever published here. Some 2500 words of special text on "Facts about Finland" prepared by Professor John H. Wuorinen, Columbia University, accompany it.



Madelon Huellinghorst, recently appointed eastern representative of American Type Founders' new rubber plate division. Mrs. Huellinghorst was first engaged by ATF to demonstrate its rubber plate machine at the National Graphic Arts Exposition last fall. She is now cooperating with lithographers and printers in the development of the rubber plate technique.

•

Stecher-Traung Net $293,657

Stecher-Traung Lithograph Corp., of Rochester and San Francisco earned a net income for 1939, after provision of $87,695.54 for Federal and state income taxes, of $293,656.81, the company reported last month. This compared with 1938 net income of $111,600.60, an increase of 163 per cent. Directors elected Louis Traung, of San Francisco, new president to succeed his twin brother, Charles F. Traung, who died recently. H. E. Gardner, of San Francisco, and Joseph E. Machell, of Rochester, were elected directors. After payment of preferred dividends of $94,375, there remained $199,281.81, equal to $1.12 each on 178,148 shares of outstanding $10 par common stock.

•

Discuss Litho Finishing

A discussion of lithographic finishing featured the meeting of the Young Lithographers' Association held at the New York Advertising Club in February. Speakers were M. S. Burroughs, Dexter Folder Co., on equipment and paper; Rudolph A. Froehlig, of Badger Cut-Outs, on mechanical displays; Nicholas H. Ludwig, Arvey Corp., on novelty cut-outs and water-proofing; Edward I. Shavitz, Perfect Finishing Co., on varnishing and high die-cutting; Joseph Siegel, Trade Bindery, Inc., on binding, stretching and folding; Stanley P. Stanley, McKenzie Service, on finishing, handling and mailing. The March meeting of the Young Lithographers' Association was held at the New York Advertising Club on March 13th. Election of officers, followed by entertainment, was the order of the program.

•

New Class Begins July 1

The Lithographic Technical Foundation, New York, announces that the Intensive Course in the Fundamentals of Lithography, given annually in cooperation with the New York Trade School will begin on Monday, July 1st. The Intensive Course is designed to enable young technical men to obtain a basic knowledge of the lithographic process from both a scientific and a practical viewpoint. Candidates must have had sufficient training in chemistry to enable them to understand its applica-

A Sign of SIEBOLD High Quality

LITHOGRAPHIC CHEMICALS

Modern Lithography requires the maximum purity and uniformity in chemicals, therefore you too should avail yourself of our "Over half a century" of specialized study in acquiring chemicals with the utmost in quality.

Some of the most popularly used, we have listed below.

Sodium Sulphite Anhydrous, Photo
Sodium Hyposulphite, Pea, Rice
Ammonium Bichromate U.S.P.
Phosphoric Acid 85% U.S.P.
White Rubber Cement, C.P.
National Photo Carbons
Potassium Alum, Photo
Edible Egg Albumen
Cotton, Absorbent
Hydrofluric Acid
Hydroquinone
Gum Arabic
Asphaltum
Opaques

Send for Price List and Color Books

J. H. & G. B. SIEBOLD, Inc.
Since 1882
Printing **INKS** Lithographing
and Lithographic Supplies
47 WATTS STREET, NEW YORK
WAlker—5-5565-6-7-8

OFFSET BLACKS · COLORS · SAFETY INKS · ROLLERS
MOLLETON · DAMPER COVERS · RUBBER BLANKETS



Lithographers know! Men who produce the job, realize they cannot take chances.

Save money by shipping via Miami Valley Shippers' Assn.

Hence, HALFTONE OFFSET for unfailing results . . . for clarity of detail, for solids that are solids, free from muddy or mottled effects!

You have been looking for a stock midway between offset enamel and regular offset. Here it is . . . HALFTONE OFFSET, dull or gloss.

Samples on request . . . of course.

Makers of Quality Offset, Lithograph and Book Papers
THE CHILLICOTHE PAPER COMPANY
Executive Offices and Mills: CHILLICOTHE, O.

Pacific Coast Sales Office:
1003 N. Main St., Los Angeles, Calif.

Chillicothe
A BUY-WORD FOR HIGH-GRADE PAPERS

tion to lithography. Young chemists and chemical engineers are considered the most acceptable candidates for this specialized work.

Some who have already enrolled for the 1940 course hail from such distant points as Texas and Oregon, thus indicating that again as in previous years the group will represent widely separated parts of the country. Companies who contemplate enrolling men for this course should communicate with the Foundation at once since only twelve students will be accepted.

•

Duenewald Offers New Awards

Duenewald Printing Corp., New York, in collaboration with the Society of Illustrators, is offering prizes of $250 for the best set of illustrations for any book which it prints—by either lithography, letterpress, gravure or photogelatin—between March 1, 1940 and March 1, 1941. The award will be in two divisions: $125 for the best set of illustrations in color; and $125 for the best set in black and white. In addition, a bronze plaque will be awarded to the publisher of the book with the winning illustrations. The jury of award will be chosen from the Society of Illustrators. The art work will be judged for its illustrative value to the contents of the book only, not how well it adapts itself to any particular process. Further particulars may be obtained from R. M. Duenewald, president of the company.

•

Curran Heads St. Louis Assn.

Con P. Curran, president of Con P. Curran Printing Co., has been elected president of the Associated Printers & Lithographers of St. Louis. He succeeds Ray Bardgett, vice-president of John S. Swift Company, Inc. The election of officers and directors of the association took place at the annual dinner meeting, held last month at the Park Plaza Hotel. Following the election, Frederick B. Heitkamp, vice-president of the American Type Founders Sales Corp., Elizabeth, N. J., addressed the group.

John M. Wolff, Jr., president of Wolff Printing Co., was chosen vice-president; George B. Gannett, president, George D. Barnard Stationery Co., treasurer; Harold M. Hungerford, A. C. Clayton Printing Co., secretary, and Gordon C. Hall, executive vice-president. Directors elected, in addition to the officers were: Earl R. Britt, Britt Printing & Publishing Co.; George M. Wagner, president of Garrison-Wagner Printing Co.; C. C. Crossman, Skinner & Kennedy Stationery Co.; Ray Bardgett, John S. Swift, Inc.; William S. Cummings, Comfort Printing & Stationery Co.; Henry Keeler, Keeler-Murray Printing Co.; Maurice Mendle, Mendle Printing Co.; Daniel J. Kerwin, Woodward & Tiernan Printing Co.; Alexander Crow, McMullen Printing Co.; L. B. Painter, Sr., Model Printing & Stationery Co.; Clyde Murphy, A. C. Clayton Printing Co., and Harold Hungerford.

•

Heads Phila. Committee

Frank M. Sherman, Lanston Monotype Machine Co., Philadelphia, heads the Philadelphia committee in charge of celebration arrangements for observing the 500th Anniversary of the Invention of Printing, being held throughout 1940. The Philadelphians will hold an exhibit at the Franklin Institute, in that city, beginning in June and running for six months.

•

Urges Direct Mail for Luggage

Speaking at the convention of the National Luggage Dealers Association in Chicago last month, Homer J. Buckley of Buckley, Dement & Co., declared that "luggage stores are alive with tremendous possibilities for promotions through direct mail." He outlined specific ways for using direct mail effectively in this specialty business, and cited instances of how they could prove profitable.

•

Adopts Insurance Program

Consolidated Lithographing Corp., Brooklyn, has adopted a double coverage group program which provides its employees with life insurance, supplemented by sickness and accident benefits. Announcement of the plan was made last month by J. A. Voice, president. The plan is being underwritten by Metropolitan Life Insurance Company on a cooperative basis whereby the employees contribute a fixed amount and the employer bears the balance of the entire net cost. The plan provides $500 life insurance and $10 weekly sickness and accident benefits. It also provides for visiting nurse care and the distribution of pamphlets on health conservation and disease prevention.

•

Reviews Employment Problems

Thirty-five tested procedures for stabilizing employment in industry, successfully utilized in the four broad fields of production, distribution, personnel and management activity, are analyzed in a survey report made public last month by the National Association of Manufacturers as a part of industry's nationwide efforts to regularize employment wherever possible. The report contains a compilation of 68 case histories of individual companies which present in detail practical experiences with employment stabilization and the degree of success accomplished. The study is the most comprehensive yet made in the field.

•

Announce IPI Contest Winners

First prize in the Fourth Annual IPI Essay Contest on Color has been won by Lawrence Mund, 17 year old senior at the New York School of Printing, it was announced last month by Fred J. Hartman, chairman of the Contest Advisory Committee and educational director of the National Graphic Arts Education Guild, co-sponsors of the project. The winner was awarded a $300 scholarship to the Department of Printing at the Carnegie Institute of Technology, Pittsburgh.

•

Installs New Hoe Unit

Cleveland Plain Dealer has just ordered twelve new Hoe Arched-Type Super-Production units, equipped with two Hoe Super-Production folders, twelve Hoe three-arm reels, twelve Hoe electrically-controlled automatic tensions and twelve Hoe full-speed paster mechanisms. By the addition of the new twelve-unit press, the *Plain Dealer* will be equipped with one of the most complete newspaper plants in the country, it is said.

LITHOGRAPHIC PLATE GRAINING CO.
OF AMERICA INC.

One reason why we have grown to be the largest plate graining plant in the world is that every plate, no matter how small, must be exactly *right* before it leaves our plant . . . and it must leave on "time" or sooner than promised.

Zinc and Aluminum Plates

UNGRAINED GRAINED REGRAINED

We specialize in small plates; including plates for the Multilith.

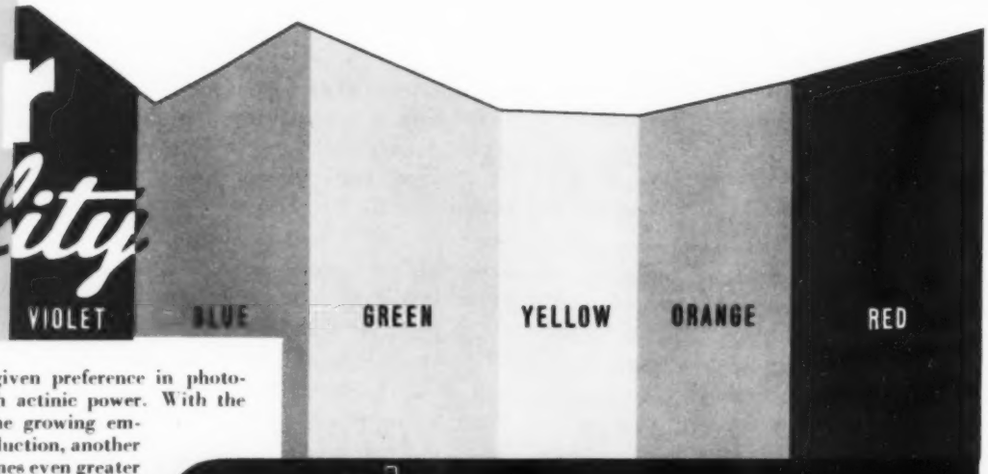
Service plus Quality—**You get this important *combination* when you send your plates to us.**

LITHOGRAPHIC PLATE GRAINING CO.

37-43 Box St., Brooklyn, N. Y. **of America, Inc.** **EVergreen 9-4260-4261**

color Quality

COLOR DISTRIBUTION OF LIGHT FROM WHITE FLAME CARBON ARC



● The carbon arc was first given preference in photolithography because of its high actinic power. With the increasing use of color and the growing emphasis on fidelity of color reproduction, another property of the carbon arc assumes even greater importance. This property is COLOR QUALITY.

The white flame carbon arc supplies ALL the primary colors at substantially equal intensity. This fact greatly simplifies the problem of obtaining ACCURATE *Color Reproductions.*

USE NATIONAL TRADE-MARK PHOTOGRAPHIC CARBONS

NATIONAL CARBON COMPANY, INC.

Unit of Union Carbide UCC and Carbon Corporation
Carbon Sales Division: Cleveland, Ohio
General Offices: 30 East 42nd Street, New York, N. Y.
Branch Sales Offices:
New York - Pittsburgh - Chicago - St. Louis - San Francisco

NEW EQUIPMENT AND BULLETINS

Norman-Willets Catalog

Norman-Willets Co., Chicago, has just issued a new catalog of its graphic arts supplies. The catalog includes a complete list of dry plates, films and darkroom equipment. Copies are available.

•

New Varityper Portfolio

Ralph C. Coxhead Corp., New York, is distributing a direct-mail portfolio entitled "How You Can Profit By Using Varityper." The portfolio contains a booklet showing a selection of Varityper faces and samples of work produced on the Varityper, including a menu, a form for submitting estimates, a rail and bus schedule and a bibliography. No effort was made to make the type catalog complete, but rather a representative type selection comprising over 50 of the most popular fonts used in Varitypography is given. A few of the fonts shown are pica, elite, chemical, gothic, medical, script, library, mathematical, fractional and tariff symbols. The catalog was lithographed by National Process Co. Copies are available.

•

New Ink Sample Book

Ceb Printing Ink Co., Chicago, is distributing a new ink sample book. Bound between pyroxylin covers, the new sample book contains illustrations of fifty-eight different ink colors. Copies available.

•

Neenah Promotion Aids

Neenah Paper Co., Neenah, Wis., has just published two portfolios, one entitled "Prize-Winning Letterheads," and the other, "Build Your Business Records on Neenah Papers," for distribution to lithographers and printers. "Prize-Winning Letterheads" contains lithographed and letterpress letterheads which were awarded prizes in a contest conducted during the past year. "Build Your Business Records on Neenah Paper" contains numerous specimens of paper showing various uses and suggested forms and layouts.

•

Strathmore Staple Papers

Strathmore Paper Co., West Springfield, Mass., as the initial step in a new 1940 campaign to promote its Staple Papers Group, has just prepared eight brightly colored mailing pieces arranged in a giant display box for direct distribution to its agents' salesmen, and for individual mailings to lithographers, printers and advertisers. Designed to show the various treatment possible with each of the six Staple Papers in the Strathmore line, the box contains illustrated mailing pieces ranging from a Charles Dana Gibson sketch to a portrait of a rare East Indian cat, halftones, line cuts, over-prints, straight-way screens, offset, letterpress, swatch and "paper-patch" sampling, multifolds and other characteristics. Their purpose is to serve as actual sales tools which lithographers and printers may use to sell their customers. Strathmore Staple Papers, which were first introduced a year ago, are featuring two new lines, Strathmore Writing and Strathmore Book, bringing the total number in the group in 1940 from four to six.

•

Paisley Non-Warping Paste

Paisley Products, Inc., Chicago, recently announced a new paste for printers and book-binders, known as No. 396. It is said the new paste will adhere to all grades of paper stock, and to chip and binder's board without wrinkling or warping. The new paste is applied in the usual manner, by hand brushing or machine, and is designed to permit a longer working range by the operator, as more work can be laid out at one time, it is claimed.

•

Urban Markets Study

Outdoor Advertising, Inc. is advocating the use of its well-known "Urban Markets and Retail Sales" study, which was originally prepared for evaluating markets in relation to outdoor advertising coverage, for placement of store and window dis-





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play material. "Urban Markets and Retail Sales" is designed to furnish sales and advertising managers with basic and impartial market data. It is now being used, according to Outdoor Advertising, by more than 100 representative organizations for formulating their merchandising policies. It is felt that the study will enable the lithographer to increase his volume of sales on point-of-sale displays by furnishing a guide to population by territories. A brochure is being distributed describing the urban markets study in detail, copies of which are available.

•

New Carbon Ribbon Device

Planographers' Rig & Reel Co., St. Louis, has just placed on the market a device consisting of reel and take-up mechanism by which standard carbon ribbon may be used with any standard typewriter for producing typewritten copy for the offset camera. The spool of carbon ribbon is placed on a holder at the right of the typewriter; the ribbon is threaded through the typewriter ribbon holder, and is taken up on a spring-operated winding device which clamps to the desk or table at the left of the typewriter. In operation, the ribbon is moved forward exactly one full space at each stroke of key or space bar. The manufacturer will supply complete information and price on request.

•

New Offset Paper

Louis Dejone Co., Fitchburg, Mass., has just placed on the market "Special Litho Cis", a new offset paper product especially manufactured for use with high-gloss inks or where varnish is to be used. The new sheet has been designed, it is announced, to avoid difficulties resulting from mottling of the varnish, and excessive absorption.

•

Morrill Celebrates 100 Years

George H. Morrill Co., division of General Printing Ink Corp., New York, has issued a booklet in commemoration of its 100th Anniversary entitled "A Centennial of Progress." The booklet presents photographs of the founders, Samuel Morrill and George H. Morrill, Sr., a thumbnail history of important dates in the George H. Morrill Co. which paralleled important developments in the graphic arts in general, and an account of the history and founding of the firm. The company is also offering seven ink specimen books showing its: (1) label inks; (2) offset inks; (3) metallic printing inks; (4) corrugated and fibreboard inks; (5) half-tone blacks and process color inks; (6) carton inks; (7) cotton and burlap inks. A self-mailer is inclosed with the booklet for the convenience of those who would like to have copies of the specimen books.



•

Revises House Magazine List

Printers' Ink Monthly, New York, has recently brought up to date the list of house magazines which it originally published in 1938. The new compilation was published in the November and December 1939 issues of the magazine, together with a short supplementary list in the January issue. The list of 901 publications is confined to publications of external distribution and does not include plant papers and internal house magazines. In addition to the titles of the publications, the names and city addresses of the organizations issuing them are indicated. In view of the growing list of house publications produced by the litho process, lithographers will undoubtedly want a copy. It is available in pamphlet form at twenty-five cents each. Copies may be obtained from MODERN LITHOGRAPHY or by writing directly to *Printers' Ink Monthly.*

•

Sorg Issues "Since 1852"

Sorg Paper Co., Middletown, Ohio, has just issued a handsome lithographed, plastic-bound, booklet entitled "Since 1852," one of a series of mailing pieces to provide lithographers with the latest paper information. The cover is illustrated with a beautiful reproduction of a Spanish galleon painted by L. Stears Thompson, symbolic, so the copy reads, "of romance and adventure." Among the contents of the book are a page of reproductions of a number of torn and frayed newspaper clippings found in the sweatbands of men's hats and in men's wallets, both inspirational and sentimental; a page of reproductions of labels and tickets illustrating the qualities of Sorg Papers for this type of work; current examples of cartoon humor as exemplified by the comics in today's newspapers and as contrasted with "Humor As Was," showing caricatures by George Cruikshank, who in the middle of the last century was England's outstanding caricaturist and commentator; and other pages in



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which the rewards of research, early paper making, Kodachromes and the influences of tradition are discussed. A full-page reproduction of the likeness of Abraham Lincoln is also included. The booklet is lithographed on Sorg's Equator Offset.

•

Conti-Glow Lacquer-Enamels

Continental Lithograph Co., Cleveland, is vigorously merchandising its Conti-Glow line of fluorescent lacquer-enamels, which are said to emit brilliant colored light when held within range of the unseen radiations from a black light lamp in a darkened room. The lacquers are perfectly harmless (so is the light) and may be used over any color. They are being sold in the advertising field primarily for indoor display, 'where the vivid contrasts, brilliant light-emissions and 'motorless' animation attainable reach out to grasp and hold attention," and to sign and lighting makers for use in showing the actual working of a projected sign or installation, in place of the color sketches formerly used.

•

Whiting-Plover Portfolio

Whiting-Plover Paper Co., Stevens Point, Wis., is distributing a fifty page, plastic bound portfolio of letterheads with a variety of layout ideas. The portfolio is divided into five sections, each of which, features a style of letterhead adapted to the requirements of various businesses. In addition, each section is illustrated with detailed layouts, to show the composition of the heads. Envelopes to match are inserted in the back cover. Copies are available on request.

•

Cites Success with Posters

Outdoor Advertising, Inc., New York, is distributing copies of a booklet describing the successful poster advertising campaigns of Leslie Salt Co., San Francisco, based on the theme "Season With Leslie." Leslie has been able to provide a complete market coverage through poster advertising, the booklet points out, at the low average cost of 9½c per thousand net advertising circulation in its territory of distribution. The booklet states that about 90 per cent of Leslie Salt's entire advertising appropriation for consumer advertising is invested in poster advertising.

•

Anthony J. Foerstel Dies

Anthony J. Foerstel, 71, president of Foerstel Lithographing Co., St. Louis, for 33 years prior to his retirement in November, died last month. Associated with the company for 50 years, Mr. Foerstel retired at the time the riverfront clearance project, now in progress, forced the removal of the company from its long-established plant at 21 North Second St. to its present quarters at 509 North Broadway.

•

Ink on Winning Label

Printing ink manufactured by Commercial Printing Ink Corp., New York, was used on the label that won first prize in the recent Modern Packaging Award. The label was one among several that were made up for the McCormick Co. by Gamse Litho Co., Baltimore.

•

Paper Control

(*from page* 33)

od should never be less than two weeks. This period should be sufficient to allow the paper to become acclimated to natural conditions. It is only after this conditioning takes place that a lithographer can safely run the paper through his presses and hope to avoid serious feeding and delivery difficulties. The safest course for the lithographer is to have his paper well in advance of the actual running, even though it has been properly seasoned at the mill, so that it will have an opportunity to also become seasoned to the conditions of his particular plant.

A good example of properly and improperly seasoned paper was in evidence not so long ago and the writer had the opportunity to observe at first-hand the importance of this factor. The particular run in mind was a three-color job being run three times through on a single-color press. Part of the run was on one kind of paper and the balance was to be on a 50 per cent rag-content grade of our manufacture. The first grade had come from the mill the day before running time, while the latter lot had been taken from a stock of a month's standing. The "fresh" stock gave no particular trouble in the feeding but with the addition of the second and third colors, it was immediately noticeable that it had stretched but the seasoned stock ran perfectly from feeding on through delivery each time and the register of all three colors was perfect.

So properly made, controlled and conditioned paper is vitally important to the manufacturer, the lithographer and the consumer. Careful and scientific handling all down the line, from the mill to the finished job will not only make everyone's job just a bit easier, but also more profitable.

•

Spraying Printed Sheets

(*from page* 27)

ment has made it uniformly possible to run full color, at all times, on any kind of stock and with any type of ink, without danger of offsetting, sticking or freezing. With the use of the non-offset gun the necessity of "doping" the inks and the risk of changing color through the run is eliminated to a great extent. Nor is it necessary to run a test quantity to determine whether or not the ink is offsetting. The press can be started as soon as the makeready is complete and the job can be run off with safety. The hazard of static in the sheets is eliminated to a great extent, because of the mechanical separation of sheets by means of the small starch particles. Sprayed sheets job easier and are much simpler to handle at the cutting and folding machines and in the bindery.

In the method described in this article the mix used for spraying is a special type of starch mixed with water and alcohol, boiled down to the proper consistency. When atomized through the nozzle, the mix evaporates leaving small globular particles of starch on the sheet. These particles not only assist in a mechanical separation of the sheets but also in surface setting the inks. As these globules are microscopic in size they have no effect whatever upon succeeding colors, nor are they visible to the naked eye.

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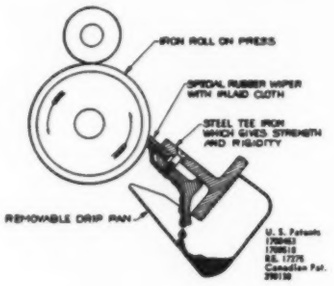
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LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department to Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents in coin or U. S. stamps. Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio.

Photography and Color Correction

Density Measurement. G. Hartley. *Photo Technique*, 1, No. 7, Dec. 1939, pp. 52-3. The circuits, construction, and methods of use are given for photoelectric densitometers using: (1) a barrier type cell, (2) an emission type phototube and vacuum tube amplifier powered by batteries, and (3) a circuit that will operate from DC or AC lines.

How To Make Color - Separation Negatives From the Kodak Wash-Off Relief Color Process. C. P. Coffey. *Professional Photographer*, 33: 43-4, March 1939. The article is the first of a series on the production of prints by the Kodak Wash-Off Relief process. In it is described the determination of the filter factors of a tricolor set. (*Monthly Abstract Bulletin of Eastman Kodak Company*, 25, 1939, p. 528).

The Photographic Process (Book). J. E. Mack and M. J. Martin. McGraw-Hill Book Company, 330 W. 42nd Street, New York, New York, 586 pp., $5.00. This book begins with a history of photography, then progresses to optics, lenses, cameras and accessories, the photographic emulsion and its exposure, processing of photographic materials, and contact and projection printing. There are chapters on color and its influence on photography, technological photography, photomechanical reproduction processes, and natural color photography, scientific and pictorial photography. In each chapter the fundamental principles are clearly and adequately given and matters under discussion are illustrated with carefully selected photographs. A bibliography, appendices giving the essential elements of mathematics and chemistry, a formulary listing 11 pages of formulas for processing solutions, and a manual of 31 experiments is included. (*Photo Technique*, 2, No. 1, Jan. 1940, p. 48).

Tricolor Separation Technique. W. C. Housekeeper. *Photo Technique*. 2, No. 1, Jan. 1940, pp. 36-40; No. 2, Feb., pp. 26, 30, 45. To determine the proper exposure and development times for each separation negative of a set, an accurate densitometer, voltage control of the light source, standardized compounding and use of the various solutions, and knowledge of the construction and use of the characteristic curve are essential. In the procedure herein outlined, standard sensitometric methods are used for the exposure of the panchromatic emulsion, without a filter and with each of the tricolor filters, using a step wedge as an intensity scale. The making of the step wedge, troubles with filters, and exposing the film to the step wedge are discussed in the first installment. The second part deals with development of test films, the effect of adding replenisher to the developer, and the determination of filter factors. Some troubles which may be encountered, and the results of measurements on several films and developers are given.

Tri-X Film for Kodachrome Separation. F. A. Smyth and M. W. Seymour. *Photo Technique*, 2, No. 2, Feb. 1940, pp. 23, 52. The making of successful three-color separation negatives from Kodachrome transparencies requires a panchromatic emulsion with the following characteristics: (1) superior latitude for exposures through any of the three tri-color filters, (2) soft gradation when suitably developed, and (3) high speed. In addition to satisfying the above requirements, Eastman Tri-X panchromatic cut film possesses the advantages of fineness of grain and the ability to be spotted and retouched with ease. Although the film is coated on a safety support manufactured with special regard to low shrinkage and humidity amplitude, reasonable care in drying and heating is necessary. Filter factors, exposure, and development are discussed.

Color Filters and Emulsions. H. P. Paschel. MODERN LITHOGRAPHY, 8, No. 1, Jan. 1940, pp. 16-18, 53. This article discusses compensating and contrast color filters; filter factors; and color blind, ortho, and panchromatic emulsions. Their characteristics and uses in the reproduction of color copy are presented in a clear, elementary way.

Trick Lettering Effects. F. Worth. *Modern Lithographer and Offset Printer*, 35, No. 12, Dec. 1939, p. 234. Methods of producing several different types of shadow effects around lettering by means of a camera are described.

Film Characteristics. Anonymous. *Photo Technique*, 2, No. 1 Jan. 1940. pp. 28-32; No. 2, Feb. 1940, pp. 17-21. A simplified yet complete outline of the Density-log Exposure or characteristic curve (H. and D. curve) and an explanation of its various parts is presented. The practical use to which the technical data can be put is illustrated by an application of the curve. A different D-log E curve is obtained for each different time of development. Three methods of determining gamma

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(the slope of the curve) are given, and the time-gamma curve, which shows how the development contrast of the film increases with development time, is explained. As an example of the use of the D-log E and time-gamma curves, the sensitometric steps involved in making an accurate copy of a given transparency are discussed in detail.

The Technique of Carbro. C. C. Ceccarini. *Photo Technique,* 1, No. 7, Dec. 1939, pp. 21-7, 44. A detailed outline of the manipulative processes required to make a complete carbro color print is given. A feature of the article is a complete time schedule which tells the photographer just what to do (and when) to make successful color prints. Contrast control is a valuable point discussed. Formulas are given for all solutions used.

Planographic Printing Surfaces and Plate Preparation

Method and Means for Registering Printing Plates. W. F. Huck (to R. Hoe & Co.). *U. S. Patent* No. 2,177,653 (Oct. 31, 1939). The method of finishing a plurality of printing plates to produce an image in multicolor, which consists in producing on each plate a plurality of register marks accurately located with relation to a determined point located at or near the center of the plate, and trimming the margins of the plate along lines located with relation to the register marks and consequently the said point so that all the plates are exactly the same size and the images thereon located in all directions from said point to have the same relation to the edges of the plate and the said point.

Preparing Lithographing Plates. W. H. Wood (to Harris-Seybold-Potter Co.). *U. S. Patent* No. 2,186,946 (Jan. 16, 1940). A process of the character described which comprises treating a plate which is for printing in lithographic manner by applying to the metal surface a water-dispersible polymeric carboxylic acid product of the character of polymerized lanyl acetate maicic acid.

Preparing Lithographic Plates for Printing. W. H. Wood (to Harris-Seybold-Potter Co.). *U. S. Patent* No. 2,186,945 (Jan. 16, 1940). In the process of preparing plates for printing in lithographic manner, treating the image-bearing metal plate with a solution providing a polyacrylic compound.

Whither Deep-Etch? K. W. Martin. MODERN LITHOGRAPHY, 8, No. 1, Jan. 1940, pp. 26-7, 51. The use of deep-etch is increasing rapidly. Contrary to prevalent opinion, the deep-etch platemaking process is not much more time consuming than albumin. Such expected changes in offset platemaking as the use of: (1) finer screens, (2) monel and stainless steel plates, and (3) bi-metallic plates, seem to encourage rather than hinder the further use of deep-etch. A valuable little known application of the deep-etch process described herein is its use in making negatives or positives. A negative is produced from a negative and the image is reversed from left to right.

Stainless Steel. W. N. Misuraca. *National Lithographer,* 47, No. 1, Jan. 1940, pp. 24, 47. A list of the effects of most of the chemicals generally found in a litho plant, on Allegheny stainless steel is given. Stainless steel plates must be grained on both sides to prevent cupping; medium coarse carborundum and steel balls are used for about one hour at average graining speed. The grained plates after thorough cleaning and drying can be stored for a reasonable length of time without further protection. Any transferring method can be used successfully, but a method providing an image resistant to wear and of high quality should be chosen.

Equipment and Materials

Totalux. An Integrating Exposure Meter. J. L. Michaelson. *Photo Technique,* 2, No. 2, Feb. 1940, pp. 43-4. A description is given of the Totalux, an integrating light meter which compensates for light intensity fluctuations by varying the time of exposure. Thus the trial and error method is eliminated and an accurate control of exposure is provided. Illustrations and performance curves are included.

New Offset Equipment. Anonymous. *Printing,* 64, No. 1. Jan. 1940, pp. 84-6. A review of the major technical advances in offset presses, platemaking methods and equipment, inks, rollers, and accessories.

Paper and Ink

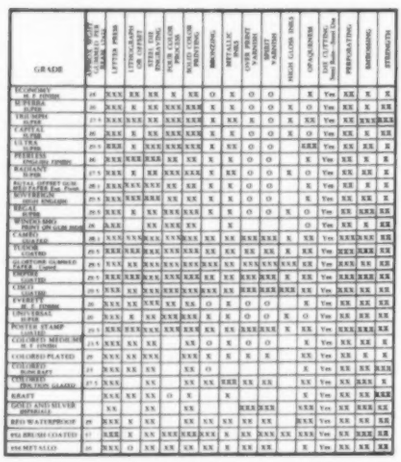
The Measurement of Ink Consistency. R. F. Reed. *National Lithographer,* 47, No. 1, Jan. 1940, pp. 16-18, 56; MODERN LITHOGRAPHY, 8, No. 1, Jan. 1940, pp. 22-5 51. A nontechnical discussion of the Inkometer and its use in measuring ink consistency.

Use of Driers. Van Wuellen-Schelten. *Farbe und Lack,* 1939, pp. 337-387; *American Ink Maker,* 18, No. 1, Jan. 1940, p. 43. The properties of lead, cobalt, and manganese driers and of the films they yield are detailed. Best practice calls for a mixture of all three drying metals; the use of drier combinations results in more uniform and fool-proof drying, and minimizes the effect of variations in atmospheric temperature and humidity. The best combination, based on per cent of metal, is: 0.5 per cent lead, 0.25 per cent manganese, and 0.1 per cent cobalt. Lithographic varnishes require about 20 per cent more drier than does raw or refined linseed oil. Manganese and lead driers should not be incorporated into oiticia oil at elevated temperatures.

Driers and Their Uses in Offset. J. Stark. *Lithographers' Journal,* 24, No. 10, Jan. 1940, pp. 416, 439. The following factors are important in choosing the correct drier: (1) atmospheric conditions in the pressroom, (2) kind of stock, (3) the color printed and the basic weight of the pigment used, (4) possibility of the printed stock being left in large piles, and (5) number of colors printed. Some of the driers at the disposal of

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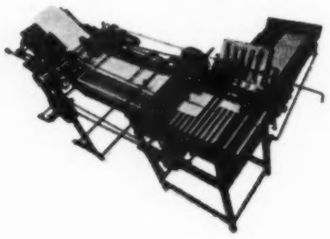
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Shown above — the world's greatest folding machine value. Accurate to a hair. Thinnest Bible stock to heaviest paper. 1, 2, 3, 4 or 5 folds in one operation. 15,000 to 50,000 folded signatures an hour. Also die-cuts, perforates and cuts. Only $95 initial — $30 a month.

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Coverwell INKS

◆

OFFSET
LETTERPRESS
ANILINE

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MARTIN DRISCOLL & CO.
610 FEDERAL STREET • CHICAGO, ILLINOIS
BRANCH PLANT IN MILWAUKEE, WISCONSIN

STANDARD LITHO GRAINING CO.

We Specialize in

ZINC and ALUMINUM PLATES

UNGRAINED - GRAINED
REGRAINED

A Trial Order Will Convince

1432 E. 49th St. CLEVELAND, OHIO
Telephone: HENDERSON 0811

the pressman are Japan drier, cobalt drier, paste drier, and litharge. The following rules are fundamental to the use of driers: (1) no more than a certain limited amount (2-4 per cent) should ever be added; (2) they should not be added until the ink is ready for use; (3) an unknown drier should not be used; (4) a drier should not be expected to overcome excessive press-room humidity; and (5) two kinds of driers should not be used in one ink unless it is known that they will not react harmfully.

The Printing Ink Patents of the United States. International Association of Printing House Craftsmen, Research Commission. *Share Your Knowledge Review,* 20, No. 10, Aug. 1939, pp. 27-40; No. 11, Sept., pp. 25-35. All the U. S. patents classified under printing inks are listed, and a cross-classified analysis of them is presented. The list is restricted almost wholly to those patents covering methods of ink manufacture, rather than those citing their uses.

Ink Troubles . . . 1930 and 1940. Anonymous. *American Ink Maker,* 18, No. 1, Jan. 1940, pp. 23, 25-6. A table of 35 ink troubles, their identification, possible causes, and remedies, an abbreviated version of which has been printed and reprinted several times during the past 10 years, is herein presented in its original complete form.

General

The Short Scale in Offset Color Printing. *Deutscher Drucker,* 45: 472-73, June, 1939. Transfer methods have been replaced by metal printing and the deep-etch method. The latter process provides precise printing elements carrying a hitherto unattainable quality of ink without loss of detail. Work is still printed in six to eight colors because of conservatism and unfamiliarity with half-tone possibilities. The metal etching methods of the photoengraver are not so flexible or simple as dot-etching on glass or film, and it is possible to maintain better modulation and tone rendering in the middle tones in the offset process. Many difficulties in color reproduction result from the purely empirical basis of working methods. Although more time-consuming, as much color etching or retouching is done on the positive as possible, because the result is more readily judged than on the negative. A direct-screen negative offers many advantages besides the lower material cost. The middle tones are almost perfect and only the shadows and highlights require retouching. The lithographer's custom of thinking in full, three-quarter, one-half, and one-quarter tones is inadequate for the production of four-color offset work. In the case of the short color scale, it is essential that all operations be performed by a pure etching technique. Manual additions are only permissible on the yellow plate. On the red, blue, and black printing plates, every stippled or knifed spot is obvious in the finished print. The use of a standard color scale permits the printing of different subjects at the same time, and more accurate reproductions in the case of reprints. The standard scale is especially important for the reproduction of natural-color photographs. (*Monthly Abstract Bulletin of Eastman Kodak Company,* 25, 1939, pp. 524-5).

Instrumentation Studies. XXXIV. Penetration of Papers by Liquids and Solutions. Part I. General Discussion of the Phenomena. Institute of Paper Chemistry. *Paper Trade Journal,* 110, No. 4, Jan. 25, 1940, pp. 44-50. Current theoretical descriptions of the flow of liquids and solutions through such porous and fibrous materials as paper are summarized. Tests employed to evaluate paper for various uses involving penetration by liquids and solutions are discussed in the light of these theories.

Offset Technique. J. Stark. *Inland Printer,* 104, No. 4, Jan. 1940, pp. 35-7. The following subjects are discussed: (1) adjustment of ink rollers, (2) swelling of composition rollers at the ends, (3) setting dampeners, (4) running cardboard and heavy blotting paper, and (5) storage of press plates to be re-used.

Miscellaneous

Skin Ailments and Bichromate. A. H. Reiser. *Printing Equipment Engineer,* 59, No. 2, Nov. 1939, p. 28; No. 3, Dec., p. 54. Cyanide, hydrofluoric acid, gum arabic in dry form, nitric acid fumes, turpentine, chromic acid, and bichromates constitute chemical hazards in lithography. Suggestions for labeling containers and obtaining relief from the dangerous effects of these materials are given. The two principal forms taken by bichromate poisoning are chrome holes or ulcers, and dermatitis. Precautions recommended are blood examinations, the use of rubber gloves, and thorough washing in special solutions, the formulas of which are given. The best remedy is complete avoidance of exposure to the disturbing influence of the chemical.

St. Louis Young Execs Elect

Officers were elected recently by the newly-formed Young Executives' Group sponsored by the Associated Printers & Lithographers, as follows: Leo Robben of S. G. Adams Stationery Co. was named president; Hartlet Comfort, Comfort Printing & Stationery Co. vice-president; and George Skinner, Buxton & Skinner Stationery Co., secretary-treasurer. Carl Zerwick of Graham Paper Co. gave the junior executives an interesting and informative talk on "Paper, Its Manufacture and Its Relation to Printing Sales," following the election.

•

Renews Poster Contracts

Griffin Manufacturing Co., shoe polishes, has renewed contracts for poster advertising on the stations of the BMT Subway and Elevated Systems in New York, and the New York Independent Subway System, for five years.

•

Hal Macoy, Jr., of Hart Printing Co., St. Louis, was married last month. The bride was Miss Elizabeth Sidney Johnston.

•

Edward S. Daly, for 51 years an employe of Woodward & Tiernan Printing Co., St. Louis, died last month. He was 66.

EVERY TYPE OF ROLLER
FOR
Lithographic Work

There are today a diversity of rollers for use on offset presses.

To meet these demands we manufacture,

STAR RUBBER ROLLERS
GRAIN AND SMOOTH LEATHER ROLLERS
MOLLETON, VELVETEEN AND MOLESKIN ROLLERS

In addition to these lithograph Rollers, we also manufacture

CRESCENT OIL ROLLERS

which are today giving universal satisfaction, due to their endurance and ink distributing qualities.

We do not recommend any type of roller, either for ink or water, that will have the slightest tendency to scratch the plate, for we know how expensive and delicate the plates are.

REMEMBER —
"GOOD ROLLERS CREATE GOOD IMPRESSIONS"
and order from any one of the addresses below

BINGHAM BROTHERS COMPANY
FOUNDED 1849
Every Kind of Roller and Adhesive
ESTABLISHED 1849
NEW YORK 611 PEARL STREET
PHILADELPHIA 101 CHERRY STREET & EMERALD & E. HAGERT STS.
BALTIMORE 151 COLVIN STREET
ROCHESTER 580 HUDSON AVENUE

Must sell at once!

HARRIS
S - 4 - L
20 x 30

MIEHLE OFFSET PRESS MODEL 42
MAX SHEET 29" x 43" WITH DEXTER SUCTION PILE FEEDER AND EXTENDED DELIVERY.

Write for details today!

CRAFTSMEN FINANCE CO.
STANDARD BUILDING CLEVELAND, OHIO

We compliment the trade of modern lithographers for their achievements!
LET US PROVE OUR MERITS IN THIS FIELD

Contact Us For

LITHO EQUIPMENT and SUPPLIES
THE DOUTHITT CORPORATION
650 W. BALTIMORE AVE. DETROIT, MICH.

"SULLEBARGER"

for

HARRIS

DEEP ETCH CHEMICALS

CAMERAS
SCREENS
LENSES
ARC LAMPS
VACUUM FRAMES
WHIRLERS
SUPPLIES

E. T. SULLEBARGER CO.
110 FULTON STREET NEW YORK, N. Y.
538 SOUTH CLARK STREET CHICAGO, ILL.

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The Textbook of PHOTOGRAPHY and PLATEMAKING for PHOTO-LITHOGRAPHY

The standard textbook used by the Chicago School of Printing and Lithography.

280 pages of easy to understand, step-by-step procedure for every operation from copy to the completed plate. Some of the subjects covered are . . .

PHOTOGRAPHY: The chemistry of photography and formulas; The procedure for making Wet and Dry Plate Negatives; Filtering; Halftones; Screen Separations; Drop-Outs. PLATEMAKING: The chemistry of lithographic printing; Albumin platemaking; with formulas and procedure; Deep-etched plates by the gum or glue processes; Blue prints and other direct printing processes. Hydrometer control; pH control, etc. ***Price $5 with order.***

Modern Lithography
254 W. 31st Street New York, N. Y.

CLASSIFIED

All classified advertisements will be charged for at the rate of ten cents per word. $2.00 minimum, except those of individuals seeking employment, where the rate is five cents per word, $1.00 minimum. Address all replies to Classified Advertisements with Box Number, care of Modern Lithography, 254 W. 31st St., New York.

•

Trained Help:

Do your plans include enlarging your Offset Department? . . . The Chicago School of Printing & Lithography can supply you with well-trained cameramen, plate makers, and offset pressmen. Or, you can send men from your other departments for special, intensive training in Offset Lithography. We offer both day and evening courses which run for twelve week terms. Next term begins June 17. Why not write or phone Harold E. Sanger, Director, Chicago School of Printing & Lithography, Six-Ten Federal Street, Chicago, for assistance in your offset employment problems?

•

General Information Concerning Inventions and Patents

A reference book for inventors and manufacturers, also containing sections on the registration of trademarks and copyrights, and a "Schedule of Government and Attorneys' Fees"—sent free on request. Simply ask for "booklet" and "fee schedule." Lancaster, Allwine & Rommel, Registered Patent and Trade-Mark Attorneys, 402 Bowen Building, Washington, D. C.

•

Position Wanted:

Webendorfer pressman—thoroughly experienced on 17″ x 22″, 22″ x 29″. Available immediately. Address Box No. 547.

•

Sales Promotion Man:

Advertising ideas, copy and presentation visuals, backed by 20 years practical working knowledge of letterpress, lithography and photography. Formerly creative advertising man for large national manufacturer and production manager with agency. Work recognized by national authority. Now employed in metropolitan center. Wants opportunity. Salary secondary. Box No. 549.

•

For Sale:

Offset Lithographing Plant, 28″ x 42″ Harris and 14″ x 20″ Columbia Offset Presses, Whirler Vacuum Frames, Ben Day equipment, A-1 condition. Excellent buy. Address Box 548.

•

Practical Lithographer:

Four years with large New York lithographer as plant superintendent; excellent production record with experience that should be of service to some progressive house; wishes position in some executive capacity. Books, Display, Catalogues, Labels, Color and Black and White. Address Box 550.

•

For Sale:

Hacker hand proof press; ink knives; hand trucks; motors; safety solvent cans. Storms-Harvey Equipment Co., Inc., 123 Bleecker Street, New York City.

•

Answer This For:

An energetic experienced young Harris offset pressman, two color or single. Will give you fast production and quality. References furnished on request. Address Box No. 543.

•

Situation Wanted:

A competent camerman and platemaker, accustomed to quality work, seeks permanent connection. Capable shop foreman. Any location considered. Address Box No. 544.

•

Position Wanted:

Young production executive now employed as superintendent of eight press plant, desires change. Will accept secondary position in large plant where opportunity exists for advancement. Not only a practical man, but familiar with all phases of offset production and costs. Go anywhere. Address Box No. 545.

•

Want to Buy:

Offset Press 22″ x 34″, 28″ x 42″, 35″ x 45″, or 42″ x 58″. Private Party. Address Box No. 546.

•

Pea Marketers Change Name

Canned Pea Marketing Institute, Inc., is the new name of the former Canned Pea Marketing Cooperative. Decision to change the name was reached at a meeting in Chicago recently, where reorganization as a Delaware corporation instead of a Wisconsin concern was arranged for. Under the new setup the Institute will continue to make large use of lithographed advertising materials to promote increased sales of canned peas, it was announced.

•

Uses Fluorescent Inks

The February issue of *National Sign Journal,* Denver, Colo., contains a double-page supplement printed with fluorescent inks. The purpose has been to give sign advertisers an idea of what illuminated displays look like after dark. Copies of the issue are available.

•

Presents Packaging Lectures

Lectures on package design feature the March program at Art Center, Chicago, the recently organized cooperative sales promotion headquarters for commercial artists. Robert Sidney Dickens, package designer, is scheduled to talk at four meetings and a display of recent package creations is being held coincident with the lectures.

•

Magill Names Baasch

Magill, Weinsheimer Co., Chicago, has appointed Alfred Baasch plant superintendent. He succeeds Herbert Roberts who left to become general manager of Fort Wayne Printing Co., Fort Wayne, Ind. Mr. Baasch was formerly manager of the customer service department, a position which has been filled by Herbert Robinson.

"WHERE-TO-BUY-IT"

NOTE: This is a classified list of the companies which advertise regularly in MODERN LITHOGRAPHY. It will aid you in locating advertisements of equipment, materials or services in which you are particularly interested. Refer to the Advertiser's Index, on page 65 for page numbers. *"Say you saw it in Modern Lithography."*

CHEMICALS

Agfa-Ansco Corp.
Eastman Kodak Co.
Harris-Seybold Potter Co.
Philip A. Hunt Co.
Litho Chemical & Supply Co.
Mallinckrodt Chemical Works
Merck & Co., Inc.
Norman-Willets Co.
Harold M. Pitman Co.
Senefelder Co., Inc.
J. M. & G. B. Siebold, Inc.
Sinclair and Valentine Co.
E. T. Sullebarger Co.

GRAINING AND REGRAINING

(Zinc, Aluminum, Glass and Multilith Plates)

Fuchs & Lang Mfg. Co., Div. General Printing Corp.
International Printing Ink Div. of Interchemical Corp.
Litho Plate Graining Co. of America, Inc.
Reliable Litho Plate Graining Co.
Senefelder Co., Inc.
Standard Litho Graining Co.
Texas Offset Supply Co., Inc.
Western Litho Plate Co.

GRAINING AND REGRAINING MATERIALS

American Graded Sand Co.
International Printing Ink Corp.
Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.

INKS—(Varnishes and Dryers)

Crescent Ink & Color Co. of Penna.
Martin Driscoll & Co.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Gaetjens, Berger & Wirth, Inc.
International Printing Ink Div. of Interchemical Corp.
E. J. Kelly Co.
George H. Morrill Co. Div. General Printing Ink Corp.
F. G. Okie, Inc.
Pope & Gray, Inc.
The Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair & Carroll Co.
Sinclair and Valentine Co.

MISCELLANEOUS

Advertising Typographers of America, Inc., The (Typography)
Russell Ernest Baum (Folding Machy.)
Ralph C. Coxhead Corp. (Composing Machines)
Ben Day, Inc. (Shading Medium)
Dexter Folder Co. (Folding Machy.)
Leiman Bros., Inc. (Vacuum Pumps)

PAPER

Chillicothe Paper Co.
Hammermill Paper Co.
Mid-States Gummed Paper Co
Rising Paper Co.
Sorg Paper Co.
Strathmore Paper Co.
West Virginia Pulp & Paper Co.

PHOTO DRY PLATES AND FILMS

Agfa Ansco Corp.
G. Cramer Dry Plate Co. (Photo Dry Plates)
Eastman Kodak Co.
Norman-Willets Co.
Harold M. Pitman Co.

PLATE MAKING EQUIPMENT & SUPPLIES

American Type Founders Sales Corp.
Artists Supply Co. (Opaque)
California Ink Co., Inc.
The Douthitt Corp.
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
C. P. Goerz American Optical Co. (Lenses)
International Photographic Research Laboratories (Cameras—Densitometers)
William Korn, Inc. (Litho Crayon and Litho Crayon Paper Pencil Mfrs.)
Lanston Monotype Machine Co.
National Carbon Co., Inc. (Carbons)
Norman-Willets Co.
F. G. Okie, Inc. (Opaques—Developing Inks)
Harold M. Pitman & Co.
Rutherford Machinery Co., Div. General Printing Ink Corp.
Senefelder Co., Inc.
E. T. Sullebarger Co.
Texas Offset Supply Co., Inc.

PLATE MAKING SERVICES

Baker Reproduction Co.
Photo-Litho Plate Service Co.
Swart-Reichel, Inc.

PRESSROOM EQUIPMENT & SUPPLIES

American Type Founders Sales Corp. (Presses—Offset Spray Gun, etc.)
Bingham Brothers Co. (Rollers, etc.)
Sam'l Bingham Son Mfg. Co. (Rollers)
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp.
Godfrey Roller Co. (Dampening Rollers).
Harris-Seybold-Potter Co. (Presses)
Ideal Roller & Mfg. Co. (Rollers)
International Press Cleaners & Mfg. Co. (Press Cleaner)
International Printing Ink Div. of Interchemical Corp.
Kimble Electric Co.
Harold M. Pitman Co.
Rapid Roller Co. (Rollers and Blankets)
The Rathbun & Bird Co., Inc. (Machinists)
Roberts & Porter, Inc.
Senefelder Co., Inc.
J. H. & G. B. Siebold, Inc.
Sinclair and Valentine Co. (Blankets)
E. T. Sullebarger Co.
Vulcan Proofing Co. (Rollers and Blankets)

The Glamour Market

(*from page* 19)

buyers interviewed gave us a definite indication of how offset sales may be extended in the cosmetic and toilet preparations field. Up until six or eight months ago, he told us, they had been doing by letterpress each year some 100,000 copies of a 3 x 6 booklet describing the company's products and indicating various skin treatments. A switch to offset, he disclosed, gave them an equally satisfactory job and saved them $400. He had a complaint to file, though, about offset salesmen. Not over one out of four, he said, knows anything about the mechanics or basic advantages of the offset process. The others, he says, are just contact men whose customary approach is, "How about some lithography today?"

In the case of this concern only two or three window displays are used each year, and only about one thousand units are purchased each time. They run quite high in unit cost, however. Occasional counter displays are bought at odd times. All are placed on a competitive basis, and before we identified ourself completely we had practically been invited to bid. Labels are produced by letterpress, because of the metallic paper stock which is a long-standing package feature. No package inserts are used, as only one of the concern's products is cartoned.

Another source gave us a series of figures which added up to 10,000 displays annually, 4,000,000 labels and 5,000,000 booklets. Their labels, they said, were all lithographed because they get cleaner and sharper results, with less of a tendency to smear. This smearing danger is an important factor, of course, in the packaging of a cream or lotion. Their labels were formerly produced for them on stone presses, but four years ago they shifted over to metal.

Another fair sized company reported using 7,000,000 package inserts, 10,000,000 labels and 70,000 counter cards and window displays. On this account, too, silk screen is the principal competitor on the display portion of the business. A smaller portion of the displays are produced by letterpress,—where fine half tone work is used.

TURNING from specific cases back to general considerations, again, we found that it is essential to consider the seasonal nature of the cosmetic business in any approach to this market. Dartnell figures show the following seasonal indices for the cosmetic business:

January	3	July	5
February	5	August	6
March	5	September	7
April	6	October	12
May	6	November	25
June	5	December	15

Over fifty per cent of the industry's sales volume is concentrated in the fourth quarter of the year, due to the big upswing in the Christmas gift trade. With plans for Christmas business in the formative stage from two to six months before the peak sales months, however, it would seem to be indicated that the time for lithographers to concentrate their best efforts on this market would be in the summer months. This is an added point recommending the development of accounts in the cosmetic field, as of course any business which can be picked up to iron out valleys in the seasonal production curve is doubly desirable.

•

Variables in Reproduction

(*from page* 23)

flects a small percentage of blue and the magenta a good deal of the yellow-green, it is impossible to achieve the proper balance and the resultant color will tend toward an orange rather than a true red.

IT IS impossible to match or duplicate a brilliant color approximating the printing ink itself since in each case the ink absorbs such a large percentage of its own color, instead of reflecting it completely. The superimposition of all the inks full strength will not generally give a dense neutral black but rather a greenish or reddish black, depending on whether the red or blue-green ink has the greater absorption deficiency. Hence the need for the fourth impression to give a neutral black rendering. Merely because an ink by itself appears brilliant and of the proper hue is no indication that it will function properly in conjunction with the other colors. Inks should be chosen, not for their individual properties, but for their effectiveness when superimposed. It is highly important to standardize on the group of inks which work best for your process.

(*This is the first of two articles by Mr. Paschel on Variables in Color Reproduction. The second will appear next month*).

Chicago Group Elects Officers

George F. McKiernan, of George F. McKiernan & Co., Chicago letterpress firm, was re-elected president of the Chicago Graphic Arts Federation at the annual mid-winter business meeting. Others re-elected include: first vice-president, Harry O. Owen, of C. O. Owen & Co.; second vice-president, Walter H. Nelson, of Rand, McNally & Co.; treasurer, W. H. King, of Stationery Mfg. Co. Among the new directors elected was Theodore Regensteiner, of Regensteiner Corp. Mr. Regensteiner is also a director of the Lithographers National Association, New York.

•

Litho Club Hears Harr

Luther A. Harr, treasurer of the city of Philadelphia, addressed the Litho Club of Philadelphia at the Poor Richard Club last month. Dr. Harr, who has recently returned from abroad, described conditions in Europe and voiced his opinion about how they will affect the United States.

•

Frank Gonda, of Einson-Freeman Co., New York, lectured before the Chicago Federated Advertising Clubs, last month. His subject was "What To Say on Window and Counter Display."

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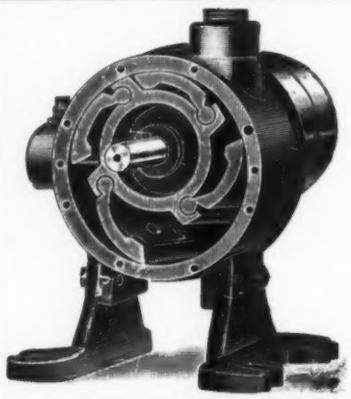
Richard Cyrex, of I. S. Berlin Printing & Lithographing Co., Chicago, was married last month. His bride was Miss June Mitchell, assistant purchasing agent for Berlin.



"ASCO"
(RED)
OPAQUE
BLOCKS OUT WITH A SINGLE STROKE
Exceptional opacity permits close contact with print.
Ground extremely fine. Flows freely from brush, pen or airbrush. Leaves a thin smooth film that will not crack or chip off.
Test it yourself — Send for a sample.
ARTISTS SUPPLY COMPANY
7610 Decker Ave. Cleveland, Ohio
Ask your dealer for "Asco"

FOR SALE
Two Miehle 38 x 54 Single Color Offset Presses
WITH DEXTER FEEDERS IN FINE CONDITION
•
ZEESE-WILKINSON CO., Inc.
Metropolitan Building Long Island City, N. Y.
Phone: STillwell 4-8620

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IN BUSINESS SINCE 1898
MACHINISTS
For LITHOGRAPHERS — PRINTERS
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MACHINES RE-CONDITIONED
85 GRAND STREET NEW YORK, N. Y.
Telephone: CAnal 6-4145-4146



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For operating Gas Burning Blowpipes
Furnaces
Oil Burners
Paper Feeders
Bottle Fillers
Gas Machines
Atomizing
Agitating Liquids
Vacuum Printing Frames
Printers, Bookbinders Machinery
Efficient
Powerful NOISELESS
LEIMAN BROS.
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NEW YORK CITY

FREE TRIAL OFFER
SUPREME OFFSET BLACK
That's just what we mean — a chance to find out why hundreds prefer Supreme Offset Black. It's a clean working, hard drying rich black with an absolute minimum of "greasing" on the plate.
Write for information on our
FREE TRIAL OFFER
E. J. KELLY COMPANY
1829 N. Pitcher St. Kalamazoo, Mich.

KORN'S
LITHOGRAPHIC CRAYONS
" CRAYON PAPER PENCILS
" STICK TUSCHE
" LIQUID TUSCHE
" RUBBING INK
" TRANSFER INK
AUTOGRAPHIC TRANSFER INK
MUSIC - PLATE TRANSFER INK
Manufactured by
WM. KORN, INC.
260 WEST STREET NEW YORK

MAKE MONEY with VARI-TYPER
WRITE TODAY for new demonstration portfolio, "How to Make Money with VARI-TYPER" . . . with actual samples of work produced.
Hundreds of Lithographers are making money by using the Vari-Typer . . . the composing Type Writer with changeable faces and spaces. This compact machine reduces composition costs, for forms, bulletins, booklets, catalogs, folders, etc., for Offset reproduction. Investigate the Money Making possibilities in your business.
RALPH C. COXHEAD CORPORATION
Manufacturers of Vari-Typer
333 Sixth Avenue New York, N. Y.

A REASON WHY
every one who sells to lithographers should advertise in MODERN LITHOGRAPHY.
It is thoroughly read both by the men who buy—in the office, and by the men who have important influence in the matter of what should be bought—in the shop.
WRITE FOR ADVERTISING RATES TO
MODERN LITHOGRAPHY
254 WEST 31st STREET NEW YORK, N. Y.

Craftsmen See IPI Movie

At the monthly dinner meeting of the St. Louis Club of Printing House Craftsmen, held last month at the York Hotel in that city, International Printing Ink's color movie, "Keeping in Touch," and the American Airlines feature film, "The American Way," were shown. The club is at present busily engaged with plans for the 7th District Conference of Printing House Craftsmen, to be held at the DeSoto Hotel in St. Louis, April 27-28. Charles Rugger is general chairman. Delegations are expected from Memphis, Nashville and several Central Illinois clubs. Meanwhile, the ladies' auxiliary of the St. Louis club is making arrangements for a buffet supper and card party at the Town Club, Tuesday night, March 26.

•

Fordson High Teaches Offset

Another in the growing list of schools teaching photo-offset throughout the country which has come to our attention is Fordson High School, Dearborn, Mich. Fordson initiated photo-offset as a course in its vocational training program about three years ago. The students in the course are specializing in printing for which one year in the offset department is required. Thus far, it is said, all of the students who have been graduated from Fordson have been placed in printing establishments. L. J. Gardner is in charge of the offset division.

•

Ad Club Marks 35th Year

The 35th anniversary of the Advertising Club of New York will be celebrated throughout March with a series of special luncheons, dinners and other activities at the club house, Park Avenue and 35th Street, New York. Leading organizations are planning to pay tribute to officers and members of the club, and open house will be held for all New York business men.

•

H. Blacker Printing Inks, Inc., Cincinnati, announces that Malcolm J. Long has joined its organization. He was formerly Cincinnati district manager of the Pigment Color Division of Imperial Paper & Color Corp., Glens Falls, N. Y.

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"Wake up, Cuthbert! There's a salesman here from some outfit that I never heard of. Maybe you know what he's talking about!"

. . . your salesmen?

THE PROBLEM: Your salesmen call on prospective customers, especially new prospects, unheralded and unsung . . . prospects don't know your salesmen, your firm or your goods . . . salesmen start cold from scratch . . . selling is slow, expensive, and inefficient that way.

THE SOLUTION: Use of regular advertising in Modern Lithography, reaching directly the people you want to sell . . . your goods and your firm become more widely known . . . your salesmen immediately recognized and accepted . . . makes for easier and more economical selling.

. . . ***if it's in the field of lithography that you want more business, we suggest advertising in***

MODERN LITHOGRAPHY

254 WEST 31st STREET NEW YORK, N. Y.

Tale Ends

FROM Ardlee Service, Inc., New York photo-offset house, comes this little contribution. Titled "The Lingo of Photo-Offset," it appears in a recent direct mail piece sent out by Ardlee:

If when streets are dark and dreary
Into Ardlee's plant you'll steal,
Slip behind the skillful workers,
You'll hear words to make you reel.

"Blow this dame up; crop at neck; and
Bleed the bottom and the side.
Shoot this man, reduced per layout"
But you needn't run and hide.

These, the terms of Photo-offset;
Innocent enough, don't fear.
Tarry just a little longer,
Plenty others you will hear.

Their "exposures" are all decent,
As they labor, no one shirks.
They may often "gum a plate up,"
Rarely do they "gum the works."

They, too, have their moving pictures,
But it's something that they hate.
Don't they fly into a frenzy
When a form "walks off the plate!"

Odd, the terms; unique, the process,
Much to hear and more to see.
Drop in when you have the time, for
Always welcome you will be.

* * *

We heard a speaker last month tell a group of printers and lithographers that "the sales piece which contains the greatest array of facts will interest the greatest number of buyers. The more information we can get our client to put into his sales piece, the more sales he will make — and the more printing we will sell him." Phooey! There are too many facts in this world now which are ignored. Facts are important, but so is selection, presentation, suspense, vitality in a sales piece. Too many facts like overeating is a strain on the digestive process and makes dull, lifeless advertising.



When color counts . . . . count on

REPROLITH

ORTHOCHROMATIC

and

ORTHOCHROMATIC THIN-BASE

Here's the film you need for colored copy . . the universal film for line and half-tone work, bringing an extra margin of quality, plus:

1. **High color sensitivity.**
2. **Maximum contrast.**
3. **Greatest resolving power.**
4. **Extra latitude in development.**
5. **Anti-halation coating.**
6. **Safety base.**
7. **Dependable uniformity.**

FOR BEST RESULTS USE BEST MATERIALS

Agfa Ansco, Binghamton, N. Y. Made in U.S.A.

Agfa

PRESS MODERNIZATION MEANS OPPORTUNITY FOR PROFITS IN . . . .

Modern Offset

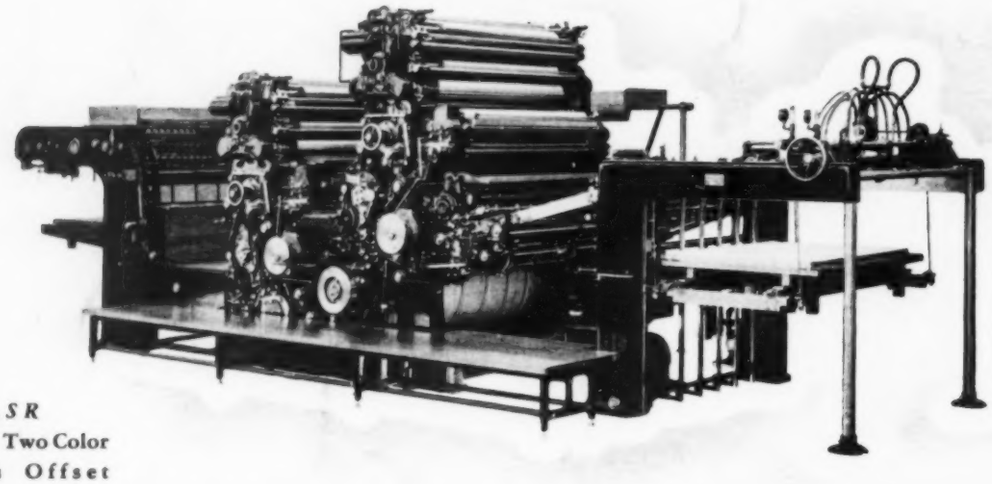
Opportunities exist for offset profits in direct proportion to pressroom modernization. Obsolescence in press equipment, or obsolescence in printing method, cannot give equal opportunities in competition with modern equipment and modern methods of reproduction.

Press modernization with Harris equipment means profit opportunities. Such modernization means that you can OFFER your customer more and GIVE him what you offer.

Quality work can be produced only on quality presses. Harris has made quality presses since 1906. They are STILL the yardstick of offset value.

HARRIS LITHO-CHEMICALS

Through research Harris has developed and standardized new chemicals for both deep etch and surface plate making processes. Full details upon request. Write us with reference to your lithographic problem.



LSR
26"x40" Two Color
Harris Offset

• HARRIS • SEYBOLD • POTTER • COMPANY •

PIONEER BUILDERS OF SUCCESSFUL OFFSET PRESSES

General Offices: 4510 E. 71st Street, Cleveland, Ohio. *Harris Sales Offices:* New York—330 W. 42nd Street; Chicago—343 S. Dearborn Street; Dayton—819 Washington Street; Atlanta—(Harris-Seybold Sales Corp.) 120 Spring Street, N. W.; San Francisco—420 Market Street. *Factories:* Cleveland, Dayton.